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An investigation of sociolinguistic variation in al- 'Aḥsā' Arabic

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Thesis submitted for the degree of PhD

2016

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Abstract

The present study sets out to bridge in gaps in the Arabic sociolinguistic scene, which currently does not adequately address issues related to forms of stable linguistic variations in local vernacular features and the way they, among other locally homogeneous features, react to pressures of change towards incoming supra-local variants, as well as the ways in which such relationships may be reflected in patterns of convergence, non-convergence/divergence as motivated by social factors. Where pertinent, the study also examines the influence of linguistic diffusion on the transmission of linguistic constraints, and on the relationship between stylistic shifts and status of the linguistic variable involved. To examine these topics, an investigation of sociolinguistic variation was conducted on the speech of 89 Arab speakers from al-ʿAḥsāʾ – a governorate in eastern Saudi Arabia. The focus of this research was on how social factors such as socio-sectarian affiliation, age, gender, and education may influence linguistic variation at the levels of phonemics ((k), (g), and (ɣ)) and morphophonemics (the 2nd person singular feminine object/possessive suffix (-ik), and the 1st person singular possessive/object pronoun (-i)). The study also looks into the effects of phonetic environment and style on the use of (k) and (g). Quantitative mixed-effects analysis was conducted on data drawn from sociolinguistic interviews. Results show that forms of convergence, non-convergence and divergence are significantly determined by all or some of the social factors investigated, in varying degrees with each variable. Generally, a progressive levelling out of regional vernacular features has been observed in favour of supra-local norms. Findings also indicate that phonetic constraints on the use of (k) and (g) are lost. It has also been found that (k) is an indicator designating social strata, whereas (g) is a marker indexing social value. Sociolinguistic findings that are specific to al-ʿAḥsāʾ Arabic can not only augment our understanding of regional sociolinguistic patterns, but also have meaningful theoretical implications related to the mechanisms underlying processes of linguistic change and stable linguistic variation.

Dedication

To God, my mother and brother ‘Abdullāh

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List of abbreviations

3p	-	3 rd person
2p	-	2 nd person
s.	-	singular
d.	-	dual
pl.	-	plural
f.	-	feminine
m.	-	masculine

The Arabic/Semitic phonetic transcription and transliteration systems

		Bilabial	Labiodental	Interdental	Emphatic interdental	Alveolar	Emphatic Alveolar	Alveo-palatal	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	Vls.					t	ṭ		k ^j	k	q		ʾ
	Vd.	b				d	ḍ			g	g		
Fricative	Vls.		f	θ		s	ṣ	š		x	X	ħ	h
	Vd.			ð	ḏ	z	ẓ			ɣ	ʁ	ʕ	
Affricate	Vls.					č			č				
	Vd.					dz		j					
Nasal	Vd.	m				n							
Lateral	Vd.					l							
Flap	Vd.					r							
Glide	Vd.	w							y				

Vowels

	Front	Central	Back
High	ī		ū
	i		u
	ē		ō
	e		o
Mid		ə	
	ā		ɑ: ɒ:
Low	a		ɑ ɒ

Diphthongs

aw

ay

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Chapter 1 Introduction

1.1 Introduction

This research presents an empirical, quantitative investigation of the effects of social factors (socio-sectarian affiliation, age, gender, education) and, where relevant, linguistic constraints (phonetic environment, style), on the use of phonemic ((k), (g), and (ɣ)) and morphophonemic ((-ik), and (-i)) variables. These are studied through an examination of the speech of 89 speakers from al-ʿAḥsāʾ – a governorate located in eastern Saudi Arabia. In so doing, the research yields real-time evidence of the recessiveness or maintenance of local linguistic realisations as described by earlier researchers such as Prochazka (1988) and Holes (1991). In addition, this research offers some insights into dialect contact (cf. Trudgill, 1986), more particularly into patterns of convergence and divergence (cf. Auer, Hinskens, & Kerswill, 2005) between different social groups in al-ʿAḥsāʾ. It also sheds light on processes of dialect levelling and the way in which local variants compete with variants from the putatively developing Saudi supra-local variety, or *koiné*. Additionally, an examination is provided into the ways in which different social groupings show varying degree of convergence or non-convergence with supra-local features. Further topics covered include intralinguistic alternations between styles and the various issues related to the relationship between geographical diffusion and the weakening of internal linguistic constraints (cf. Labov, 2007).

In this chapter, an overview of the present study will be provided (section 1.2), followed by an outline of thesis chapters (section 1.3).

1.2 Sociolinguistic variation in al-ʿAḥsāʾ dialect

This section describes the significance and purpose of the study, in addition to briefly outlining the research questions, research design, theoretical framework, and scope of the research.

The motivations underpinning the present research are threefold. First, from a dialectological perspective, the dialect of al-ʿAḥsāʾ is inadequately represented in extant literature. What is available is confined to citation by Prochazka (1988) of examples taken from al-Hufūf Arabic within his broad survey of Saudi Arabian dialects. This is supplemented by brief remarks from researchers such as al-Tajir (1982) and Holes (1991), who are only referring to al-ʿAḥsāʾ Arabic in the context of other dialects. This is unfortunate given the considerable interest in the dialect of al-ʿAḥsāʾ, a sedentarised variety of Gulf Arabic, which is spoken chiefly by local Shiites. However, al-ʿAḥsāʾ Arabic has also been acquired to a significant degree by Sunni Najdī migrants, who have nevertheless preserved some of their own linguistic features, while in turn exerting influence on the localised sedentarised variety (for more information on al-ʿAḥsāʾ Arabic see section 2.8). Through in-depth examination of the investigated variables, the present study sheds light on the co-existence of linguistic features deriving from Saudi Arabian and other Gulf dialects. Attention is also drawn to certain linguistic aspects that are particularly distinctive of al-ʿAḥsāʾ dialect in comparison to Saudi and other

Gulf dialects, such as the unusual unconditioned use of the [-ya] reflex of the 1st person singular possessive/object pronoun or the use of specific sets of phonolexicalised items, where word-stem palatalisation of (k) and (g) occurs. The present study additionally offers the opportunity to to diachronically trace the origins of linguistic features which may have their origins in ancient varieties such as pre-Classical Arabic, (non-Arabic) Modern South Arabian tongues, and other Semitic languages (see sections 6.2.1, 7.2.1, 8.2.1, and 9.2.1), as well as more recent contact with Najdī Arabic, Persian and other varieties.

Second, from a social viewpoint, the community under investigation is unique, due to its extreme social segregation. The social context of al-ʿAḥsāʾ is rarely found elsewhere in Saudi Arabia, at least in terms of the large number of speakers belonging to both the Sunni and Shiite groups. Although these two groups have been in contact for over a century, they continue to maintain endogamous marital and family relations. Moreover, they are increasingly shifting apart in terms of neighbourhoods, leading their communication to be increasingly restricted to formal situations, such as the workplace, educational institutions, and markets. Strict forms of separation also exist in informal social settings between men and women who are not close relatives. This could potentially affect their use of linguistic features related to addressing females such as the 2nd person feminine suffix pronoun.

Third, the present research is mainly driven by a lack of research on linguistic variation and change in al-ʿAḥsāʾ which has been compounded by a

relative paucity of research into eastern Saudi Arabian dialects in general. Most of the work covering this area relates to traditional approaches of dialectology, where different linguistic features are broadly described and associated with geographical areas or tribes (Ingham, 1982; Johnstone, 1967; Prochazka, 1988). Although there have been sociolinguistic studies conducted in other Gulf countries, such as Kuwait (Taqi, 2010), Bahrain (al-Qouz, 2009; Holes, 1987), Qatar (al-Amadidhi, 1985; al-Muhannadi, 1991), and other parts of Saudi Arabia such as Makkah (al-Ahdal, 1989; al-Ghamdi, 2014; al-Jehani, 1985), Jeddah (Alessa, 2008), and Najd (al-Rojaie, 2013), sociolinguistic work in eastern Saudi Arabia is very limited in scale. An example of such work is a study conducted by al-Azraqi (2007) on the use of the 2nd person singular feminine possessive and object pronoun (-k) as found in the speech of educated male and female speakers in five cities, including ad-Dammām – a city in eastern Saudi Arabia. Another small-scale study was carried out in al-Hufūf by al-Bohnayyah (2011) who examined the speech of 18 male and female speakers aged 19 or older. The focus of al-Bohnayyah was on the use of (k) in both word stems and the 2nd person singular feminine object or possessive suffix , as well as the use of the 1st person singular possessive or object suffix (-y).

This gap in knowledge needs to be addressed in order to justifiably reach general hypotheses on the directions of linguistic variation and change in Saudi Arabia, i.e. ones that take into consideration major parts of the country. It is also of considerable interest to compare patterns of sociolinguistic variation in al-³Aḥsā' against closely related contexts such as

Bahrain, which have been much better studied (cf. al-Qouz, 2009; Holes, 1983, 1987). Finally, the unique local patterns of socially oriented variations relate in interesting ways to general hypotheses within the broader field of sociolinguistics.

Building on this last point, the findings of the present research will not only be helpful in explaining the sociolinguistic context of al-ʿAḥsāʾ, but may also be beneficial in contributing to our wider understanding of sociolinguistic variation, especially in relation to theories of contact, language levelling and change. The focus on some of the main linguistic variables which involve variation in al-ʿAḥsāʾ Arabic and how they may be related to social and linguistic factors will enable the discussion of issues related to convergence, non-convergence, and divergence, both at an inter-level (i.e. in between Sunnis and Shiites) and at an intra-level (i.e. between both groups and the putative supra-local koiné). This focus also offers an opportunity to examine the faithfulness of linguistic transmission, specifically the degrees of preservation versus the weakening of certain linguistic constraints governing investigated variables, and how these may be influenced by linguistic diffusion. Finally, it provides the opportunity to discuss issues related to stylistic shifts and how they correspond to the type of linguistic variable involved.

This research will present information on the following questions in relation to the use of (k), (g), (ɣ), (-ik), and (-i) in al-ʿAḥsāʾ Arabic:

1. To what extent do speakers of al-ʿAḥsāʾ linguistically converge or diverge from each other in relation to the local variants of the previously cited linguistic variables? In cases of dialect divergence, how does linguistic variation across several variables quantitatively correlate with the social factors of socio-sectarian affiliation, age, education, and gender?
2. How do speakers of al-ʿAḥsāʾ react to the supra-local linguistic variants of the aforementioned linguistic variables in terms of convergence or non-convergence, and how do such reactions quantitatively relate to the social factors of socio-sectarian affiliation, age, education, and gender?
3. Does phonetic environment have an influence on word-stem (k) and (g) depalatalisation in al-ʿAḥsāʾ Arabic?
4. Does style have an influence on the use of (k) and (g) in al-ʿAḥsāʾ Arabic? And how?

To help answer these questions, the present study utilises quantitative methods based on the variationist approach pioneered by William Labov in the 1960s. These techniques enable the analysis of a number of linguistic variables used by participants, in terms of their correlation with social and, where relevant, linguistic determiners. Decisions relating to the selection of linguistic variables and independent factors are based on my previous

experience as a speaker of al-ʿAḥsāʾ dialect, combined with an extensive literature review of this dialect and closely related dialects. These decisions were then constantly evaluated and amended, where necessary, in accordance with first hand data. The methodology of the sociolinguistic interview was implemented as the main data collection technique, in order to access the vernacular, which is considered the best source of systematic data (Labov, 1984, p. 29). As a female Sunni insider in my early 30s, I acted as the main interviewer, with the support of a group of female Sunni and Shiite assistants from the same age group. Participants were selected based on judgement/quota sampling derived from the social factors investigated. The data were analysed using Rbrul software (Johnson, 2008), which allows both mixed and fixed-effects modelling of data. Mixed-effects analysis was used with all variables. With some variables, additional fixed-effects analyses were conducted as required. Further information on the specific details of the chosen methods and the rationale behind their use can be found in chapter 5.

The theoretical basis of this research is situated in the field of sociolinguistics, which was established during the 1960s by Labov. This theoretical construct traces its roots back to dialectology, historical linguistics, bi- and multilingualism studies, as well as influence from other fields, such as sociology and psychology (Koerner, 1991, p. 65). An all-encompassing definition of sociolinguistics would be “the study of language in relation to society” (R. A. Hudson, 1996, p. 1). One of the basic premises underlying variationist sociolinguistics pertains to the concept of ‘orderly heterogeneity’ (Weinreich, Labov, & Herzog, 1968). Unlike with traditional structuralist

approaches, where linguistic alternations are treated as forms of ‘free variation’ that are rendered outside the scope of *langue* and are thus considered extrinsic to the study of language (Gregory R. Guy, 1997, p. 128), variationist sociolinguistics is based on the assumption that languages are inherently variable and that variability is related to both linguistic and extralinguistic factors. Such assumptions are grounded in empirical quantitative findings, where linguistic variables are found to significantly correlate with factors such as age, education, class, and gender. Linguistic variability may exhibit itself at different levels of language such as “phonology, morphology, syntax, pragmatics and discourse, supersegmentals, and lexicon” (Kiesling, 2011, p. 129). This kind of variability may take place in between social groups of speakers (interspeaker variability) or stylistically within the same speaker (intraspeaker variability) (Bell, 2001, p. 142). More detailed information on the history of sociolinguistics, the basic assumptions underlying this field, major early work, and general hypotheses of linguistic variation and change, is provided in chapter four.

With regards to the scope of this study, the focus is on the speech of a relatively homogeneous group of 89 speakers, made up of sedentary male and female Sunni and Shiite participants aged 15–90 years old, who were born and raised in al-³Aḥsāʾ – a region in eastern Saudi Arabia. Five linguistic variables are examined in this study. Within the phonological realm, focus is on realisations of the voiceless velar stop (k) in word stems, the voiced velar plosive (g) (< Classical Arabic (CA) /q/), and the voiced velar fricative (ɣ). Within the morphophonemic realm, the 2nd person feminine object/possessive

suffix (-ik), and the 1st person singular possessive/object pronoun (-i) are studied. The distributions of these linguistic variables are examined with respect to the social factors of age, education, gender, and socio-sectarian affiliation. In the case of the phonological variables, linguistic factors such as phonetic environment and style are also taken into consideration.

1.3 An overview of chapters

This section provides an outline of the main structure of the thesis, which consists of ten discrete chapters. A brief description of each will be given as follows:

Chapter 1: Introduction

The present chapter provides an introduction and overview of the thesis, encompassing topics such as the significance and purpose of the study, research questions, research design, the theoretical framework, and the chosen scope of the investigation. The main structure of the thesis is also provided here.

Chapter 2: The community of al-'Aḥsā'

This chapter gives a description of the geographical, historical, demographic, and social features of the speakers of al-'Aḥsā' Arabic. The geographical information is intended to specify the locality from which the sample of the present study was drawn, i.e. to contextualise the chosen study sample. Such information will also help show how location can shape the development and

use of the language. The settlement history of al-ʿAḥsāʾ is recounted to trace the origins of the different groups who came to live in al-ʿAḥsāʾ and how they may have influenced the linguistic varieties spoken there. Demographic and social information is then provided to explain the nature of the independent social factors, including age, gender, education, and socio-sectarian affiliation, as these occur in al-ʿAḥsāʾ context. The interactions between socio-sectarian affiliation and segregations in terms of tribal origin and occupations are also discussed, in an attempt to determine the underlying linguistic differences between Sunnis and Shiites.

Chapter 3: A historical overview of Al-ʿAḥsāʾ dialect

While the previous chapter focuses on the social backdrop of al-ʿAḥsāʾ society, chapter three places the dialect of al-ʿAḥsāʾ in its wider linguistic frame in terms of history and geography. Chapter three provides some information on existing hypotheses of historical Arabic linguistic variation and change. It also presents an overview of the linguistic features of al-ʿAḥsāʾ Arabic, in light of related contemporary and historical varieties. Assigning two separate chapters for both of the communal and linguistic aspects of al-ʿAḥsāʾ speakers was intended to consolidate and deepen our understanding of each parameter before commencing the examination of how they may interact with each other.

Chapter 4: Research theory and methodology

Chapter four includes a brief overview of work antecedent to the field of sociolinguistics where the interplay of language and social factors were considered. This helps to illustrate the position and contribution of sociolinguistics to the wider field of linguistics. To help demonstrate the theoretical and methodological aspects of the field of sociolinguistics, the chapter also provides an overview of major early work in sociolinguistics. It further recounts the various hypotheses of linguistic variation and change especially those of relevance to the present study.

Chapter 5: Research methods

Chapter five offers a detailed discussion of the methods implemented in the present study. In relation to data collection, the chapter includes a description of the sample of speakers whose speech is studied. The issues related to the status of the researcher within the community are also examined, after which a description is provided of the selected data collection techniques and important ethical considerations. From the perspective of data analysis, the chapter identifies the dependent linguistic variables, and the independent social and linguistic factors. A description of data transcription and coding protocols is also provided, then supplemented with a discussion of the statistical modelling approach and software utilised. An illustration is also given for data presentation and interpretation in the present study.

Chapter 6: The (k) and (g) variables in word stems

Chapter six presents the results of the phonological variables (k) and (g). It starts with a review of previous studies, covering topics such as palatalisation in Arabic and other languages, linguistic constraints on word-stem depalatalisation in Arabic, geographical distribution of different realisations of (k) and (g) in the Arabian Peninsula, and previous findings on the social constraints of word-stem (de)palatalisation in other Arabic varieties. The literature review is followed by a description of word-stem depalatalisation data in the present study, i.e. the way the variables contexts were circumscribed and coded. Afterwards, the overall distribution of the (k) and (g) variables are presented, followed by the mixed-effects findings. The findings indicate that (k) and (g) depalatalisation is highly advanced in al-ʿAḥsāʾ Arabic and is strongly correlated with socio-sectarian affiliation, age, and gender. The depalatalisation of (g) is additionally affected by education and is highly sensitive to style.

Chapter 7: The 2nd person singular feminine object/possessive suffix (-ik)

This chapter deals with the first morphophonemic variable, the 2nd person singular feminine object/possessive suffix (-ik). Instead of grouping phonological and morphophonemic variables separately, a decision was made to discuss the morphophonemic (-ik) variable immediately after the phonological (k) and (g) variables, because it also involves palatalisation and depalatalisation processes. Separating the analysis of the phonological

variable (k) from the morphophonemic variable (-ik) is based on the fact that unlike (k), (-ik) carries a semantic function of distinguishing male and female addressees. The findings of this study further support this splitting, as the pervasiveness of the variants involved in each variable are different (see sections 6.4 and 7.4).

The chapter starts with a review of previous literature covering topics that include suffix (de)palatalisation in Arabic and other languages, linguistic and semantic constraints on suffix (de)palatalisation in Arabic, the geographical distribution of the suffix in the Arabian Peninsula, and the correlations between social factors and suffix (de)palatalisation. The second section deals with way the suffix data was circumscribed and coded. The overall distribution of (-ik) and the mixed-effects findings are also presented. Generally, the results show that depalatalisation of (k) in the 2nd person feminine suffix is less advanced in 'Aḥsā' Arabic than in word stems. The findings also indicate that depalatalisation in the suffix is significantly influenced by socio-sectarian affiliation and age.

Chapter 8: The (ɣ) variable

Chapter eight presents the phonological (ɣ) variable. The first section handles past research on topics such as the stopping of /ɣ/ in Arabic as well as similar processes in other languages, linguistic constraints on the use of /ɣ/, and correlations between the (ɣ) variable and social factors. In the second section, the (ɣ) variable data will be described in terms of the way in which the

variable was circumscribed and coded, followed by overall distributional, mixed and fixed-effects findings. The supra-local and standard variant was found to be dominant in al-'Aḥsā' Arabic. It was also found to be significantly associated with gender.

Chapter 9: The (-i) variable

This chapter deals with the second morphophonemic variable, namely the 1st person singular possessive/object pronoun (-i). A review is provided of previous studies that handle topics in this area, including the use of the 1st person suffix *-ya* in Arabic and Afro-Asiatic languages, the linguistic constraints on the use of *-ya*, the geographical distribution of *-ya* in the Arabian Peninsula, and the social constraints on the use of (-i). The chapter also presents the process by which the (-i) data was circumscribed and coded. Finally, the overall distributional, mixed and fixed-effects findings of (-i) are presented. The results of this study on al-'Aḥsā' Arabic show that variation in the use of (-i) primarily occurs in the speech of Shiites. The local variant of their speech is shown to be almost as commonly used as the supra-local one, with variation being highly influenced by age.

Chapter 10: Conclusion

Chapter 10 concludes the thesis, providing an overview of the research findings, followed by a discussion of some general theoretical implications, and suggestions for future research.

Chapter 2 The community of al-ʿAḥsāʾ

2.1 Introduction

The present chapter sets the geographical, demographic, historical, and social context of al-ʿAḥsāʾ, a governorate in eastern Saudi Arabia, and its inhabitants. This is necessary to understand the circumstances relevant to the subjects of the present study. The geographical characteristics of Saudi Arabia and al-ʿAḥsāʾ are specified in section 2.2. The history of al-ʿAḥsāʾ is briefly outlined in section 2.3. The demographic characteristics of Saudi Arabia and al-ʿAḥsāʾ are then specified in section 2.4. Section 2.5 describes the underlying differences between socio-sectarian affiliations in al-ʿAḥsāʾ in terms of religion, costumes, and inter-marriage relations, after which they are examined in terms of tribal origin in section 2.6. Occupations in al-ʿAḥsāʾ, both in the past and present, as well as their relationship with socio-sectarian affiliation and gender, are discussed in section 2.7. Finally, the manner in which education has evolved from a purely religious-literacy-based system to an advanced system that integrates worldly matters under the umbrella of religion using Modern Standard Arabic is addressed in section 2.8.

2.2 The geography of Saudi Arabia and Al-ʿAḥsāʾ

In this section, the location, land area, and boundaries of Saudi Arabia and al-ʿAḥsāʾ will be specified to show exactly from where the sample of the present study was drawn. A brief description of the terrain of Saudi Arabia and al-ʿAḥsāʾ will additionally be given to show how the types of resources possessed by Saudi Arabia and al-ʿAḥsāʾ can affect its economy, history, and

society. This will help situate the linguistic analysis within a real context for the reader.

The Kingdom of Saudi Arabia stretches over 2.149 million square kilometres (850,000 square miles), constituting around 80% of the Arabian Peninsula. Its location in the south-western corner of Asia is a meeting point of the Asian and African continents. The Kingdom is bordered by seven sovereign states. Along its northern border, from west to east, are Jordan, Iraq, and Kuwait. Its eastern frontier overlooks the Arabian Gulf and borders Bahrain, Qatar, and the United Arab Emirates (UAE). The Kingdom is bordered to the south by the Sultanate of Oman and the Republic of Yemen, and to the west by the Red Sea (cf. Haggett, 2001, p. 2048; Ḥāzimī, Khaṭṭāb, & Jayyusi, 2006, p. 1; Wynbrandt, 2010, pp. 1–2).

The terrain of Saudi Arabia is primarily a desert with a vast plateau in the centre, scattered mountainous areas and extensive coastlines on the east and west. Only 2% of the land is arable. Vegetation is restricted to small shrubs and herbs, with palm trees primarily found in some scattered oases. Saudi Arabia does not have permanent rivers, although some dry river beds may become filled with water during seasonal rains (cf. Haggett, 2001, p. 2048; Mufti, 2000, p. 1; Wynbrandt, 2010, p. 3).

Saudi Arabia is administratively divided into 13 *manṭiq'idāriyya* 'provinces' (Janin & Besheer, 2003, p. 31), including the eastern province, Riyadh province, and Makkah al-Mukarramah province. Provinces are

subdivided into 134 *muḥāfaḏāt* ‘governorates’ (Saudi Geological Survey, 2012, p. 16), such as al-ʿAḥsāʾ and al-Xubar in the eastern province. These governorates are further subdivided into 1349 *marākiz* ‘sub-governorates’ (Saudi Geological Survey, 2012, p. 16), examples of which are Salwa, and Ḥaraḏ in the al-ʿAḥsāʾ governorate.

The Arabian Peninsula has been historically divided into five districts, namely the Baḥrayn, Najd, Tihāmah, the Ḥijāz, and Yemen. The *Baḥrayn* (lit. two seas) district covers the whole eastern coast of the Arabian Peninsula, from the Euphrates to Oman, as well as the ʿUwāl islands (now known as Bahrain) (cf. al-ʿArīb, 1988, p. 22). The steppe of *Najd* (lit. highland) refers to a vast rocky plateau located in the central part of the Arabian Peninsula, which now covers most of Riyadh, the Qaṣīm, Ḥāʾil, the Ḥudūd aš-Šimāliyyah and the Jof provinces. The Tihāmah district refers to the western coastal plain of the Arabian Peninsula stretching from the Gulf of Aqaba north to ʿAsīr south (Hariri-Rifai, 1990, pp. 87–88). It consists of Tihāmat al-Ḥijāz (the northern part) and Tihāmat ʿAsīr (the southern part) (Hariri-Rifai, 1990, p. 88). The *Ḥijāz* (lit. barrier) refers to the mountain chain that separates Najd from Tihāmah, including the areas stretching from Jordan north to Yemen south (Hariri-Rifai, 1990, p. 87). Yemen is located in the south western corner of the Arabian Peninsula.

Al-ʿAḥsāʾ is the name given to an oasis region and, by extension, a governorate located in eastern Saudi Arabia (see map 1). The oasis of al-ʿAḥsāʾ is considered one of the largest in the world (al-Ṭāhir, 1999, p. 5). It

stretches over 375,000 km² (Saudi Geological Survey, 2012, p. 15), comprising roughly 69% of the province area. It borders Bqēq to the north, the Arabian Gulf and Salwa to the east, Oman to the south, and the desert of ad-Dahnā' to the west. The capital city of the governorate of al-'Aḥsā' is al-Hufūf, which has merged with the neighbouring twin city al-Mubarraz due to urban expansion. The governorate of al-'Aḥsā' also includes 43 villages divided into eastern villages, e.g. al-Jafir, aṭ-Ṭaraf, al-Qārrah, and al-Jiṣṣah, and northern villages, e.g. aš-Šuqayq, al-Muṭayrfi and al-Wazziyyah (al-Ḥulaybī, 2003, p. 15). Al-'Aḥsā' has al-'Uqayr port which used to be active in the past, but is now used only as a beach (al-Ḥulaybī, 2003, p. 15) and a historical site for tourists. In the present study the term Al-'Aḥsā' will, unless otherwise indicated, be used to refer just to the main two urban centres of Al-'Aḥsā', namely al-Hufūf and al-Mubarraz.



Map 1 Al-ʿAḥsāʾ (adapted from Google maps)

According to ad-Daxīl (1913, p. 69), there were 800 rivers in al-ʿAḥsāʾ, the headwaters of most of which, i.e. their springs, were found in ar-Rifʿah in al-Hufūf; while some headwaters were located in eastern al-Mubarrāz. It seems probable that the meaning that ad-Daxīl intended with the word *ʿanhār* ‘rivers’ was a group of channels and small streams that may possibly combine to make some rivers. The latter description is in agreement with the depiction provided by Lorimer (1975a, pp. 831–835), which describes the sources of water that existed in al-ʿAḥsāʾ in the past. He gave a detailed description of some of the springs of al-ʿAḥsāʾ such as ‘Ayn Najim, ‘Ayn Xurasān, al-Ḥārrah

etc. He stated that the waters of some springs may gather at some point to make up either streams that resemble rivers, such as as-Sulaysil, or lakes, such as Birkat al-ʿAḥsāʾ. In all, water sources used to irrigate around fourteen thousand farms (Ad-Daxīl, 1913, p. 69). Nowadays, there are many available water sources in al-ʿAḥsāʾ including wells and springs (al-Ṭāhir, 1999, p. 15) used to irrigate roughly 25,000 farms (al-Muḥaysin, 2008).

2.3 The historical profile of al-ʿAḥsāʾ

An understanding of the history of al-ʿAḥsāʾ will facilitate the analysis of its present social and linguistic features. The history of al-ʿAḥsāʾ will be discussed in terms of the different groups who ruled it, their origins, who migrated into it, and the types of linguistic varieties they used.

In order to be able to comprehend the history of al-ʿAḥsāʾ, information is required with regards to the different names of al-ʿAḥsāʾ over the ages and how they relate to the political rather than the geographical context. The stem of the word al-ʿAḥsāʾ is written and pronounced in formal Modern Standard Arabic with an initial and final *hamzah*¹ ‘glottal stop’ but it is colloquially realised without glottal stops as *al-Ḥasa*. This also applies to the way the inhabitants of al-ʿAḥsāʾ are referred to. Formally, the masculine form is *ʿiḥsāʾī*, the feminine is *ʿiḥsāʾiyyah*, and the plural is *ʿiḥsāʾiyyīn*. Colloquially, the masculine form is *ḥasāwi*; the feminine is *ḥasāwiyya*; and the plural is

¹ In this study, *tāʾ marbūṭah* realised as [h] in pause will be transcribed only in words taken from Classical Arabic as well as the Arabic dialects which have it, i.e. those which are cited in references with *tāʾ marbūṭa*. As far as al-ʿAḥsāʾ dialect is concerned, *tāʾ marbūṭa* is almost always silent and will be transcribed accordingly.

ḥasāwiyya. The word al-ʿAḥsāʾ seems to be the plural of *ḥisy*, which refers to a position under sandy soil with a solid layer of rock underneath, in which water accumulates (Kāmil, Vol. 1, p.188), and which is easily reached without digging (Nallino, 1939, p. 12). Al-ʿAḥsāʾ is also less frequently known by its historical name which is *Hajir*.

There seems to be considerable confusion regarding the identification of the name, location and boundaries of what is now called al-ʿAḥsāʾ over the ages. According to al-ʿYarīb (1988, p. 22), in antiquity the present location of al-ʿAḥsāʾ was originally called the area of Hajir, which denoted that it was an extension of its main city Hajir. He adds that Hajir was part of the earlier historical Baḥrayn district, which once stretched from the Euphrates to Oman, and which also included the ʿUwāl islands (now known as Bahrain). According to Vidal (1955, p. 6) Hajir was located near the present town of Hufūf. This is supported by al-Janbī (2004) who further claims that it was located next to al-Qarra Mountain, which was formerly known as aš-Šabʿān Mountain, located around 15 kilometres to the east of al-Hufūf city.

Vidal (1955, pp. 6–7) describes the emergence of the name al-ʿAḥsāʾ, explaining that a locality or settlement called *Māʾ al-ʿAḥsāʾ* ‘the water of al-ʿAḥsāʾ’ existed in the vicinity of Hajir. Next to this, a palace or a fortress named al-Muʾminiyyah, which was constructed by either the Qarmatian² (also called Carmathian) (cf. Böwering, Crone, & Mirza, 2013, p. 446) Abu Saʿīd

² The Ismāʿīlī Shiite dissidents originating from Wāṣiṭ in southern Iraq, who did not acknowledge ʿAbd Allāh al-Mahdi and his Faṭimī successors as leaders.

al-Jannabī or his son Abu Ṭāhir, located somewhere near what is now known as al-Baṭṭāliyyah village. This village is situated 7 km² to the north east of al-Hufūf. Al-Mu'miniyyah was announced as the capital of the region, however the local residents disapproved of this name and as such it was replaced by al-Ḥasa. This name gradually extended to other parts of the oasis, eventually replacing the term Hajir.

Under Ottoman rule (see section 2.2), al-²Aḥsā' was attached to the state of Baghdad and Basra (aš-Šubāt, 1989, p. 80) and was, together with al-Qaṭif and Qatar, called *Liwā' Najd* (cf. al-Ḥulaybī, 2003, p. 13) or *Sanjaq Najd* 'the district or area of Najd' (Turkish. Sancak), but this name was disapproved of by locals and as such was changed to *Sanjaq al-²Aḥsā'* (Lorimer, 1975a, p. 838). After the unification of Saudi Arabia (see section 2.2) by King 'Abd al-⁶Azīz, the term al-²Aḥsā' was employed to describe the whole area stretching from the borders of Kuwait in the north to Qatar in the south, and from the Arabian Gulf in the east to the desert of ad-Dahnā' in the west. The capital city of this region was stipulated to be al-Hufūf. The province of al-²Aḥsā' remained in this way until 1370 AH³ (*anno hegirae*), i.e. 1956 CE, at which time a royal decree changed its name to the Eastern Region, and made ad-Dammām its centre. At that time, the term al-²Aḥsā' was used to refer to only al-Hufūf, al-Mubarrāz and its surrounding towns, villages, and hamlets (cf. al-Ḥarīb, 1988, p. 70; al-Jāsir, 1982 as cited in al-Ḥulaybī, 2003, p. 12).

³ All dates in this thesis are given according to the western system unless otherwise noted. Hijrī dates are only provided as cited in Arabic references, which are then converted into the western system.

The location of al-ʿAḥsāʾ is highly strategic because it is just 65 km inland from the important trading port of al-ʿUqayr (cf. El-Shakhs & Amirahmadi, 2012, p. 200). Al-ʿAḥsāʾ has the additional advantage of possessing inherently rich resources, i.e. a fertile oasis with ample water supplies amidst otherwise arid areas. These factors have made al-ʿAḥsāʾ an attractive location subject to several forms of invasions over the centuries.

The ancient history of al-ʿAḥsāʾ is only poorly understood and is based on limited archaeological evidence (Crawford, 1998, p. 38). As early as 3200 B.C., the Bronze-Age Dilmun or Tilmun Civilisation, which was a vassal state of the Semitic Assyrian Empire, arose and survived for over two thousand years in what is now known as Bahrain and its adjacent eastern coastal strips of Arabia (Wynbrandt, 2010, pp. 9–10). The language of the Dilmun Civilisation is unrecorded (McIntosh & Weeks, 2005, p. 47), but it is referred to in Sumerian and Akkadian inscriptions (Donkin, 1998, p. 47). Comparatively little is known about the religion of its people, but it is known that they believed in an afterlife, worshipped multiple deities and that they had temples (Crawford, 1998, pp. 75–79). By approximately 600 B.C., historical Baḥrayn fell under the control of Babylonians (Tripp & Tripp, 2008, p. 7) who were pagan (cf. Schneider, 2011) and used Akkadian as their official language (Austin, 2008, p. 241). These were then displaced in about 540 B.C by the Persian (Tripp & Tripp, 2008, p. 8) Zoroastrians (cf. Strika, 1993, p. 507) who spoke Old Persian and Aramaic (Mahir, 2012, p. 391). Persians were, in turn, displaced in 323 B.C by the Hellenistic Greeks (cf.

Potter, 2010, p. 39) who believed in polytheism (cf. Mikalson, 2009, p. 185) and used the Greek language (Budin, 2004, p. 3).

Scholars such as al-Ḥasan (2010, p. 28), al-Mulla (2002, pp. 22–23), and aš-Šubāṭ (1989, pp. 95–96) have attempted to describe the various different peoples who had come to live in Baḥrayn by the time the Greeks arrived in the area. They divide these peoples broadly into the following: i) an-Nabaṭ, who are described as a generation of ‘Ajams (foreigners), most likely to be the group that Holes (2001, p. xxiv) describes as the Aramaic-speaking Nabataean farmers who came from Mesene in southern Iraq and who later became Arabised; ii) as-Sabābija (from Sindh); iii) az-Ziṭṭ (slaves who were originally either Indians or Sudanese); and iv) Persians, who made up the most influential group due to their strong political and social status. The above description of the inhabitants of Baḥrayn seems to be based on oral history, as no documentary evidence seems to exist to support such claims.

According to Holes (2001, p. xxiv), eastern Arabia was under Persian Suzerainty at least four centuries before the existence of Islam. He describes the ethno-linguistic elements of eastern Arabia at that time as being composed of a

mixed tribal population of partially Christianised Arabs of diverse origins who probably spoke different old Arabian vernaculars; a mobile Persian-speaking population, possibly of traders and administrators, with strong links to Persia, with which they maintained close contact; a sedentary, non-tribal community of Aramaic-speaking agriculturalists; and a Persian clergy who used

Syriac as a language of liturgy and writing more generally, probably alongside Persian as a spoken language (pp. xxv-xxvi).

Some Arab tribes migrated to the region in ancient times, such as Tanūx, who came from Tihāmah, ʿIyād, who migrated from al-Ḥijāz, and ʿAzd (al-Ḥasan, 2010, p. 28), who were originally from Yemen (Ghubash, 2008, p. 17). At some point before the 4th century CE, a conflict with their cousins resulted in the offspring of ʿAbd al-Qays’s son ʿAfṣā to migrate from Tihāmah to the eastern coast of the Arabian Peninsula (cf. al-Mulla, 2002, p. 28). When they arrived, they displaced many of the ʿAjams and local Arab residents to Iraq (cf. al-Mulla, 2002, p. 27). It was in this way that the already existing Arabic tribes such as ʿIyād and ʿAzd were displaced by Banī ʿAbd al-Qays (al-Ḥasan, 2010, p. 28). ʿAbd al-Qays, which is a branch of the Rabīʿah tribe, was one of the most influential tribes in the history of eastern Arabia. Culturally, they were mainly Christians, with some Zoroastrians among their members (Holes, 2001, p. xxiii). At some unspecified points in time, other Arab tribes also migrated to this region, such as Bakir ibn Wāʿil, Taylib ibn Wāʿil, Tamīm and so forth (cf. Holes, 2001, p. xxiii). Since the oases were primarily controlled by branches of the ʿAbd al-Qays tribe, Bakir ibn Wāʿil dwelled to the west of the oases; whereas Tamīm resided further to the west, i.e. in the desert (al-Ḥasan, 2010, p. 28).

The ʿAbd al-Qays tribe was one of the first tribes to embrace Islam (Mubarakpuri, 2002, p. 281), which occurred during the 7th Century CE. After the death of the Prophet, al-ʿAḥṣāʾ came under the Islamic rule of the Rashidun, Umayyad, and Abbasid Caliphates. In 899 CE, al-ʿAḥṣāʾ was ruled

for almost one hundred and fifty years by the Qarmatians (see footnote 2), who were assisted by al-ʿAḥsāʾ local Ismaʿīlī Shiites of Banī ʿAbd al-Qays (cf. Bogle, 1998, pp. 82–84; Brown, 2009, p. 137; Glasse, 2001, pp. 368–369; Peters, 2005, pp. 315–316). This group were later overthrown by the Uyundis, who ruled al-ʿAḥsāʾ from 1067 until the 15th century (Potter, 2010, p. 86). The Uyundis are also known to be descendants of Banī ʿAbd al-Qays.

The Ottoman Empire, led by Sultan Salim I, occupied Egypt in 1517 and subsequently inherited the keys to Mecca and al-Madina from the Mamlūks (Hariri-Rifai, 1990, p. 25). It was Sultan Salim I who appointed Sharif Barakāt as the emir of Mecca (al-Rasheed, 2010, p. 13). The Sharifian family subsequently ruled al-Ḥijāz for more than 400 years (al-Rasheed, 2010, p. 13). His successor Sultan Sulayman ‘the magnificent’ consolidated his control over Egypt and al-Ḥijāz (Commins, 2012, p. 37), after which he conquered Baghdad without bloodshed in 1534 (Commins, 2012, p. 37; Hunt, 2005, p. 52). Al-ʿAḥsāʾ also voluntarily surrendered to Sultan Sulayman in 1550, and the Ottoman annexation of al-ʿAḥsāʾ lasted until the rebellion of Banī Xālid in 1670 who then occupied al-ʿAḥsāʾ (Anscombe, 1997).

Lorimer (1975a, pp. 820–821) describes the population of al-ʿAḥsāʾ during the period of Ottoman rule as being composed of Bedouin nomads and settled townsmen and villagers. He (1975a, pp. 820–821) states that around two thirds of the population were Shiites belonging to the Baḥārnah group (see section 2.4), the descendants of whom are still found in Bahrain and Qaṭīf. The population of al-ʿAḥsāʾ at that time included a few Sunni Hwilas (a

group of Arabs who migrated to Persia and then returned), some Jews, and many African slaves (Lorimer, 1975a, pp. 820–821). Prior to the rule of the house of Sa‘ūd (starting from 1791/92), al-‘Aḥsā’ was politically associated with the Gulf. Over the course of three Saudi emirates it became increasingly connected to the interior of the Arabian Peninsula. Comprehension of the relatively recent history of al-‘Aḥsā’ requires it to be situated within the framework of the history of the Saudi emirates, which will be discussed next.

As a resource poor region, the interior of the Peninsula (known as Najd) was not very appealing to external invaders and thus maintained its independence during Ottoman rule, with Najdī towns being ruled by their own Emirs and the Najdī Bedouin tribes maintaining autonomy (al-Rasheed, 2010, p. 14; DeLong-Bas, 2004, p. 7). The rise of the first Saudi state and establishment of al-Dir‘iyyah⁴ hegemony in Najd occurred in 1745, through the actions of Muḥammad ibn Sa‘ūd with the support of ibn ‘Abd al-Wahhāb (Vassiliev, 2000, pp. 83–84). The Saudi emirate began to expand and exert its control over other areas in the peninsula, including al-‘Aḥsā’ and al-Ḥijāz, which were subjugated in 1791/92 and 1803 respectively (Vassiliev, 2000, pp. 91–96). The image of the Turkish Sultan, Selim III (known as the Commander of the Faithful and Custodian of the two Holy cities) and that of his successor Mustafā IV were severely damaged by ibn Sa‘ūd’s rise to power (Vassiliev, 2000, p. 140). Consequently, in 1818 the Ottoman Empire had Muḥammad ‘Alī Pasha send Egyptian forces led by his son Ibrahim Pasha to regain control over al-Ḥijāz and al-‘Aḥsā’ and to expel al-Sa‘ūd from Najd

⁴ A town located in the northwestern periphery of the Saudi capital, Riyadh.

(cf. al-Rasheed, 2010, p. 22; Shaw, 1977, p. 15; Vassiliev, 2000, pp. 140–141).

Saudi rule was restored relatively soon afterwards. Turkī ibn ‘Abd Allāh returned to Najd in 1824 and was able to gain control over al-’Aḥsā’ again in 1830 (Champion, 2003, p. 29). After the death of Turkī, his son Fayṣal became the ruler of Riyadh, followed by his son ‘Abd Allāh. Conflicts started to emerge among ‘Abd Allāh’s siblings (al-Rasheed, 2010, pp. 23–24). The Ottoman governor of Baghdad, Midḥat Pasha, took this opportunity to seize al-’Aḥsā’ (Vassiliev, 2000, pp. 196–201). The al-Sa‘ūd emirate in Riyadh was then supplanted by Muhammad ibn Rashīd, the emir of Ḥāyil, in 1875 (cf. al-Rasheed, 2010, pp. 23–29). The Rashīdī emirate was then overthrown by King ‘Abd al-‘Azīz al-Sa‘ūd in 1902 (al-Rasheed, 2010, p. 28). The third rise of al-Sa‘ūd subsequently expanded and evolved in preparation for a fully-fledged state. The annexation of al-’Aḥsā’ by the Turks was terminated in 1913 (Vassiliev, 2000, p. 232).

What may be concluded from the above in regard to the dialect of al-’Aḥsā’ is that it has been subject to numerous influences related to the dialects or languages of the different people who inhabited it over different historical phases. These influences may include the original features of the dialects spoken by Arabs who migrated into this area from Tihāmah, Najd and al-Ḥijāz (see section 2.3 for more details), in conjunction with the different varieties already existing in this area, and the varieties used by people who migrated into it or even ruled it.

The following section will provide a discussion of the different occupations that existed in al-ʿAḥsāʾ in the recent past and today, and the ways in which these may relate to social groupings and speech.

2.4 The population of al-ʿAḥsāʾ

Knowledge of the demographic aspects of the population of Saudi Arabia in general, and of al-ʿAḥsāʾ in particular, is essential at the level of both methodology and data interpretation. This is true especially since some of the independent factors investigated in this thesis are closely linked to demographic characteristics such as socio-sectarian affiliation, gender, and education.

According to the 2010 census,⁵ the Saudi Arabian population stands at roughly 27 million people. Around two thirds of the population are nationals. Foreign expats comprise almost one third of the population. The majority of foreign expatriates are males (6,643,000); whereas there are approximately 3 million females (cf. Population Estimates, 2010a).

Expatriates in Saudi Arabia are commonly divided into two groups: white collar workers, who do professional jobs that require a high level of education and skill, and blue collar workers, who perform labour that does not necessarily require a high level of knowledge or proficiency. The first

⁵ The general census of housing and population was first carried out in 1974 by the Central Department of Statistics and Information to gather information on the population's demographic, social and economic features to help serve the government's growth plans. The census was repeated in 1992, 2004, and 2010.

type of workers come from countries that include Egypt, Syria, Jordan, U.S, Canada, India, or Pakistan. They work in places such as hospitals, companies, and educational institutions. They may or may not be accompanied by their family members. The second type typically originates from Africa and South and South East Asia, and is employed in construction, driving, cleaning, and security. Such workers often come alone, living in the region without their families.

In 2007, the central department of statistics and information carried out a detailed demographic survey of the population according to age and education enrolments. According to the 2007 demographic survey, the majority of the population are aged 15–64 (64.7%), followed by those aged 15 and below (32.5%), and those above the age of 65 (2.8%). In relation to education, the demographic survey of 2007 shows that the level of primary school enrolment is 94.8%, while the level for intermediate and secondary levels is 63.7%, and 27.8% in higher education. The enrolment of females in higher education (32%) exceeds that of males (23.8%). The reason for this provided by the 2007 demographic survey itself is that more males join the workforce directly after secondary school. In terms of literacy, the general percentage of illiterate Saudis aged 10 years old and above is 13.7%. The rate of illiteracy increases as we move from (10-14) years old, whose percentage is 1.4%, to (65+) year olds whose illiteracy percentage is 73.9%. Due to the rapid expansion of government schools in recent times, younger generations are far more likely to be educated than are more elderly citizens. In terms of gender, the rate of illiteracy among females (20.2%) is much higher than

among males (7.3%) across all age levels. The least amount of female illiteracy is found in the eastern province of Saudi Arabia (cf. Demographic survey, 2007, pp. 18–31).

The population of al-ʿAḥsāʾ is 1,063,112. The bulk of al-ʿAḥsāʾ residents (870,577) are nationals; whereas expatriates make up only 192,535 people. Among the nationals, the number of males is 440,864, which slightly exceeds that of females, 429,713. Within the expatriate group, the number of males (150,522) is much higher than the number of females (42,013) (cf. Governorates distributions, 2010b).

2.5 The socio-sectarian context of al-ʿAḥsāʾ

Socio-sectarian affiliation is one of the independent factors investigated in the present study and, as such, specific attention is given to it in this section. The population of al-ʿAḥsāʾ includes two socio-sectarian affiliations: the Sunnis and Shiites. There are no official figures regarding the exact percentages of Shiites in Saudi Arabia or in al-ʿAḥsāʾ, but they are estimated to be around five million people in Saudi Arabia, comprising approximately one third of the population of al-ʿAḥsāʾ (Wright, 2001, p. 154). In al-ʿAḥsāʾ, the difference between Sunnis and Shiites is not confined to religious differences. The sectarian distinction involves several complex and inter-related factors such as tribal and geographical origin, inter-marriage relations, neighbourhood, costumes, or way of speech. For this reason, it is possible to argue that Sunnis and Shiites may be viewed as two distinct ethnic groups, at least to a certain extent. The term ethnicity is used nowadays to refer “to the different unequal

experience of social groups with specific cultural attributes such as language, religion, and dress codes.” (Giddens & Sutton, 2010, p. 136). Among these cultural attributes, religion seems the most prominent factor in al-³Aḥsā'. This applies more particularly to the Arab world where “religion is usually not seen as a matter of individual choice, but as a matter of family and group affiliation” (Bassiouny, 2009, p. 105). A discussion of religion, costumes, and inter-marriage relations of Sunnis and Shiites in al-³Aḥsā' is provided below. In recognition of their importance to the present study, tribal origin and linguistic variation are discussed separately in sections 2.5 and 3.3 respectively.

In terms of religion, Sunnis and Shiites are in broad agreement on the fundamental Islamic beliefs and practices. They both believe in one God, in the Prophet Muhammad, and hold that the same book, the Quran, is the revelation of God. Some Shiites believe that parts of the Quran were altered. In this regard, al-³Aš'arī (324/935) (as cited in Amir-Moezzi, 1994, pp. 86–87) divides Shiites into three groups: those who maintain that parts of the Quran were censored, those who believe that there were some additions, and those who think that the Quran was not changed. It should be said that prominent Shiite scholars such as Khomeinī, Hibat al-Lāh aš-Širhistānī, and al-³Imām al-Ḥujjah al-Balāyī have severely refuted any claims of the Quran being altered (cf. al-⁶Awwa, 2006, pp. 24–25). Both Sunnis and Shiites practice the five pillars of Islam: declaring that there is no God except Allah and that Muhammad is his messenger, prayer, *zakāt* (annually giving 2.5% of savings to the needy), fasting, and pilgrimage (cf. Terrill, 2013, p. 548).

Given these similarities, the main difference between the two groups is historical and political, primarily being attributable to their perceptions of who should have succeeded the Prophet in Islamic leadership (cf. Guidère, 2012, p. 320). Shiites believe that the leader should have been a member of Prophet Muhammad's family, and believe that the mantle passed to his cousin 'Alī, whereas Sunnis believe that the successor should have been any capable person elected by a group of trustworthy individuals, leading them to follow his companion 'Abu Bakr (cf. al-'Awwa, 2006, p. 34). Other differences between these two groups can be seen in their interpretation of the Quran (Ahlstrom, 2010, p. 86) and therefore in how they induce rulings and codes of conduct.

In al-'Aḥsā', Sunni families may be subdivided into four groups, depending on which of the four orthodox schools of Islamic law they follow: i) the Ḥanbalī school, which started to spread during the time of Saudi emirates and has now become dominant in education, followed by āl-Šams family; ii) the Šāfi'ī school, which is the oldest school in al-'Aḥsā', followed by āl-'Abd āl-Laṭīf, āl-'Abd al-Qādir, and āl-'Umayr families; iii) the Mālīkī school, which is the second most dominant school in al-'Aḥsā', followed by āl-Kiṭīr, āl-Ḥannām, and āl-Mubārak families; and iv) the Ḥanafī school, which spread during the Ottoman rule, followed by āl-Mulla family (al-Ḥulaybī, 2003, p. 19; Vidal, 1955, p. 34). The majority of Shiites, on the other hand, follow the Twelver Ja'farī School and receive their teachings from the Najaf Sheikhs in Iraq (al-Ḥulaybī, 2003, p. 19).

In relation to dress, slight differences exist between the two groups in al-ʿAḥsāʾ. Shiite men wear the *yutra* (white kaffiyeh) and do not wear the *šmāy* (red kaffiyeh). In contrast, Sunnis wear both. Shiite sheikhs or scholars wear a black or white *ʿumāma* (turban), whereas Sunni sheikhs do not. Women do not have noticeable differences in costume, as they both wear the *ʿabāya* (black robe-like garment) in public and similar types of clothes when in private.

Unlike other Islamic contexts in which intermarriage between Sunnis and Shiites are common, such as some parts of Iraq (Breidenbach, 2009, p. 147), India and Pakistan (Morgan, 1987, p. 337), Sunni and Shiite intermarriages are considered to be taboo in al-ʿAḥsāʾ. As a result of this, the two groups maintain separate and distinct kinship ties. Avoidance of miscegenation in al-ʿAḥsāʾ is not only based on socio-sectarian affiliation, however. There are also subdivisions of groups ranging from tribal to non-tribal, which typically maintain endogamous martial relations (cf. aš-Šubāṭ, 1989, p. 178). This latter practice is almost non-existent within Shiites, but very prominent among Sunnis. In the past, the situation was even more extreme among the Sunnis, as marriages used to occur only within the same tribe or family (cf. aš-Šubāṭ, 1989, p. 167).

2.6 The tribal origin of al-ʿAḥsāʾ inhabitants

Sunnis may be divided into Bedouin groups and into tribal and non-tribal ‘Ḥaḍar’⁶ settled groups. It should be noted that the word ‘Bedouin’ (Arabic *badw*) is used in Arabia to refer to a “a member of an established Bedouin tribe and does not necessarily imply a nomadic life style” (Ingham, 1982, p. 32). In essence, the primary difference between tribal Ḥaḍar and Bedouins is that the former group has been settled for a much longer period of time. Information about each group will be given below. Shiites are all sedentary (al-Ḥasan, 2010, p. 28).

Al-Baḥārnah, the singular of which is ‘Baḥrānī’, is a term used to refer to the group of Arabic-speaking Shiites living in Kuwait, Bahrain, Qatar, the UAE and some parts of the eastern coast of Saudi Arabia, i.e. mainly al-ʿAḥsāʾ and al-Qaṭīf (cf. Holes, 2010, p. 283; Lorimer, 1975b, p. 257). The term ‘Baḥārnah’ needs to be distinguished from ‘Bahraini’ which refers to both the Sunnis and Shiites of Bahrain (cf. Holes, 2010, p. 283; Lorimer, 1975b, p. 257). Although the term ‘Baḥārnah’ is used extensively in previous literature, it will not be used in the present study because it can easily be interpreted in a derogatory sense (cf. al-Ḥasan, 2010, p. 32), especially in al-ʿAḥsāʾ. Therefore, the term ‘Shiites’ will be used instead. Shiites consider themselves to be the indigenous inhabitants of the eastern coasts of the Arabian Peninsula (cf. Holes, 2010, p. 283). According to Lorimer (1975a, pp. 820–821), Shiites make up a homogenous group, as they migrated into the

⁶ This term will be used interchangeably with ‘sedentary’.

area long ago and are related to the original historical Baḥrayn population. Although some suggest, on the basis of geographical proximity and likeness of sectarian background, that Gulf Shiites are non-Arab and come from a Persian descent, this idea is definitely false (cf. al-Ḥasan, 2010, p. 30; Holes, 2010, p. 283). While it is true that many Gulf Shiites do have a Persian origin, for example ‘Ajams, the majority of Shiites in this region are both ethnically and linguistically Arabs (Holes, 2010, p. 283). The origins of the Shiites in Bahrain and eastern Saudi Arabia are said to be the same (al-Ḥasan, 2010, p. 31). They may be divided into two groups: those who belong to originally southern Arabian tribes, who became sedentarised in historical Baḥrayn long before Islam, such as ‘Abd al-Qays and Bakir ibn Wā’il, and those who belong to Najdī tribes who converted to Shiism after having migrated to the eastern coasts of the Peninsula, and who subsequently intermingled with existing Shiite groups (al-Jaser, 1981 as cited in al-Ḥasan, 2010, p. 28). According to al-Ḥasan (2010, pp. 33–34), a Shiite historian, the Shiites in the eastern parts of the Arabian Peninsular cannot trace their genealogy back to specific Arab tribes. However, this does not necessarily mean they do not have an Arab origin, especially since the loss of genealogy is a natural outcome of long historical sedentarisation processes. This latter point is supported by Holes (2010), who explains that Shiites “are not tribalised, and have traditionally led an agriculture-based, non-belligerent lifestyle in small villages” (p. 283).

In contrast, Sunnis may be divided into three groups: i) families such as āl-Šukir, āl-ʿAšgar, and āl-Nihāyah (cf. al-ʿAbd al-Qādir, 1961 as cited in al-

Yarīb, 1988, p. 375), who belong to Arab tribes, e.g. Banī ‘Abd al-Qays, who migrated long ago from Tihāmah to al-‘Aḥsā’ (cf. Holes, 2001, p. xxiii); ii) those who later migrated from Najd, especially in 1327 AH, i.e. around 1909 CE (Ibn Jalawī, 1400/1401 AH 1979/1980 CE as cited in al-Ḥulaybī, 2003, p. 18); and iii) non-tribal Sunnis, about whom little information is available. The third group may be related to an-Nabaṭ, as-Sabābija, az-Ziṭṭ, and the Persians, who are claimed by al-Ḥasan (2010, p. 28), al-Mulla (2002, pp. 22–23), and aš-Šubāṭ (1989, pp. 95–96) to have lived in historical Baḥrayn (see section 2.3). However, there is little evidence to support this. Concerning the second group, Ingham (1982, p. 11) claims that there were extensive migrations from Najd to eastern settled lands which were either movements of bulks of nomadic Bedouin groups or of families coming from settled Najdī areas. Although some of these, as stated in the previous paragraph, have become Shiites, the majority of these groups are now Sunnis. Examples of originally Najdī tribes in al-‘Aḥsā’ are Banī Xālīd, al-‘Ujmān, al-Murrah, Banī Hājar (cf. al-Yarīb, 1988, pp. 367–368; aš-Šubāṭ, 1989, pp. 96–99), al-Muṭayr, aḏ-Ḍifir, ar-Riṣāydah, ad-Dawāsir, and ‘Unayzah (al-Yarīb, 1988, pp. 368–370). Examples of specific sedentary Sunni families that migrated from Najd during the 13th Century AH, i.e. around the 19th Century CE, are al-‘Ajājī belonging to Banī Hamadān, and āl-Yunaym, who descend from Banī Xālīd (al-‘Abd al-Qādir, 1961 as cited in al-Yarīb, 1988, p. 374). There are also a group of Sunni families who belong to the Ḥijāzī Qurayšī tribe, and more specifically to ‘Alī ibn ‘Abī Ṭālib, such as āl-Xaṭīb, āl-Ḥuḏayfi, āl-Ja‘firī, and āl-Sayyid (cf. al-‘Abd al-Qādir, 1961 as cited in al-Yarīb, 1988, pp. 375–380).

2.7 Occupations in al-ʿAḥsāʾ in the past and present

The types of jobs people used to perform in the recent past reflect the social and economic environment under which today's elderly speakers were raised during their earlier life stages. Previous vocational, economic and social factors seem almost certain to have had an influence on their linguistic usage, which would have been subsequently transmitted to other generations. These in turn are likely to have become strongly subject to other influences, such as the media, education, different vocational/social patterns and new neighbourhood schemes. Most of the information below is based on previous historical accounts of al-ʿAḥsāʾ, supplemented by first-hand data obtained from elderly participants in the present study, who provided detailed descriptions of their lives when they were young.

Although it can be difficult to rigidly classify the various social groups found in al-ʿAḥsāʾ in terms of the kinds of jobs they occupy, some generalisations may be made about the majority of each group. In the past, most Shiites worked as agricultural labourers, craftsmen (cf. Ad-Daxīl, 1913; al-Rasheed, 2010, p. 33), and pearl divers (cf. Cole, 2002, p. 178; Lorimer, 1975b, p. 258). Meanwhile, the wealthier Shiites often worked as traders (Lorimer, 1975b, p. 258) and landholders (Cole, 2002, p. 178). In relation to the ownership of farms, Vidal (1955, p. 37) comments that

[o]nly a few of the most important Shiite families of al-Hasa can be considered landowners, the majority of the large owners being Sunnites. The bulk of the Shiites, although perhaps owning small

garden plots, are either craftsmen or laborers working in the gardens for wages.

Many Sunni families, especially those of Najdī origin, worked as traders (Fattah, 1997, p. 67). A minority of Sunnis were part-time agriculturalists (al-Rasheed, 2010, p. 33). In the recent past, Bedouins, who are all Sunnis, were primarily shepherds or owners of livestock, e.g. horses, camels, and sheep (cf. Lorimer, 1975a, p. 836). Some of them made a living by raiding trading caravans (cf. Vidal, 1970, p. 109). Apparently, Bedouin and most Sedentary Sunnis used to refrain from any type of work that requires physical labour. This continued even until the time the oil company Aramco started to employ people from al-ʿAḥsāʾ. In this regard, Smeaton (1973) remarks [sic] that the “Bedu take readily to mechanical work and will on no account perform menial labour, which they regard as women’s work. Such work accordingly falls to the Hadhr, who are largely Baharna” (p.11).

In terms of gender-related occupational differences, men typically carried out jobs outdoors, whereas jobs for women tended to be of a more domestic nature. In fact, women were strictly confined to their husbands’ homes and were not allowed to leave unless to visit their families, preferably at night (aš-Šubāṭ, 1989, p. 176) or dawn accompanied by a close male relative (al-Ḥulaybī, 2003, p. 21).

Based on the information obtained during interviews about the life styles of all groups, apart from Bedouins (whose females were described as having more opportunities to interact with males belonging to their extended

family), it appears that females were typically restricted to communicating with their close male relatives, i.e. fathers, brothers, or uncles, as well as their female relatives and neighbours. Exceptions to these rules applied to some females who worked as traders, seamstresses, and cleaners. Most of these women used to work at home, giving them more opportunities to communicate with females other than their close relatives and neighbours.

The oil boom substantially changed the professional and employment situation in Saudi Arabia and has had a particularly profound effect on al-³Aḥsā³. Modernity has complemented and expanded local jobs, as well as introducing new professions that have subsequently become more dominant than pre-existing ones. For instance, in the past, agricultural work was the primary source of income for residents of al-³Aḥsā³ (aš-Šubāṭ, 1989, p. 120), whereas nowadays, the oil industry is the main income source. Although farms are still found in al-³Aḥsā³, only a few elderly local men still maintain their jobs as agricultural workers. Many of them stated during interviews that the financial benefit from farms is very limited, but that they still work there because they enjoy doing so. The younger generations of locals are no longer drawn to working in farms, however, leading to expatriate workers taking these kinds of jobs. Nevertheless, young and middle-aged local men of both socio-sectarian affiliations may work in food-processing factories, such as those processing dates, which they do in a modernised way. However, the oil industry is a major employer of both males and females, especially as al-³Aḥsā³ governorate is well known for the presence of al-³Yuwār, the largest and most productive oil field in the world (Olah, 2009, p. 23). Hence, many

residents of al-ʿAḥsāʾ work for the Saudi Aramco oil company, whose headquarters are in aḏ-Ḍahrān but which has branches across the kingdom, in ad-Dammām, al-ʿAḥsāʾ, and Jubayl, and many other sites.

Individual craftsmen have largely been replaced by factories and even factory cities. There is, for instance, an industrial city located around 22 kilometres to the north of al-Hufūf. Additionally, men in al-ʿAḥsāʾ have the opportunity to work in numerous jobs found in both the public and private sectors. Nowadays, women also have far more work opportunities. Until fairly recently women’s jobs were limited to places such as hospitals, educational institutions, oil companies, banks, and salons, however they have recently been given the opportunity to work in shops, and plans are being made to build the first female-only industrial city (cf. al-Muḥaysin, 2012). In relation to gender segregation, there is a strict prohibition of contact between males and females in the majority of jobs, especially those related to education. However, in certain occupations, such as those connected to medicine, no segregation exists.

In terms of the different tribal and socio-sectarian backgrounds of people and how they relate to the jobs they occupy, it must be said that in recent times boundaries have almost disappeared between the different groups. This is with the some slight exceptions of some Bedouin groups, especially al-Murra, who represent the majority of people working in military service (aš-Šubāṭ, 1989, p. 98). Of course, it is widely acknowledged that traditionally *wāsiṭa* ‘nepotism or favouring relatives to get jobs’ (cf. Murphy,

2002, p. 19) has played a significant role in agglomerating extended family members in certain jobs. Nowadays, it is more commonly believed, at least officially, that almost everyone has an equal chance of getting a job in al-ʿAḥsāʾ, regardless of their tribal or socio-sectarian background. This has resulted in people of different backgrounds becoming increasingly intermixed in different job environments.

2.8 Education in al-ʿAḥsāʾ

Education is one of the classic factors investigated in linguistic variation studies (cf. Tagliamonte, 2012, p. 65). It has been investigated in some of the linguistic variables in the present study (see section 5.1.2.3). Therefore, some information regarding education in al-ʿAḥsāʾ will be given in this section.

Al-Yarīb (1988, pp. 246–259) gives a thorough description of the history of formal education in al-ʿAḥsāʾ, a summary of which will be provided here to help explain the educational background of present study sample. In 1924, a trader named Ḥamad an-Nuʿaym opened an-Najāḥ school in his house in an-Naʿāṯil neighbourhood of al-Hufūf to teach literacy and arithmetic. With the help of ʿAbd Allāh al-Quṣaybī the school was relocated in 1930 and expanded to teach Arabic, religious courses, and calligraphy. The school ran until the death of an-Nuʿaym in 1932. The first government school was opened in 1937, in Dār al-Ḥamīdiyyah in the city of al-Hufūf. This school

sought to teach literacy and arithmetic, but it was soon closed by the police⁷. The First Hufūf School was opened in 1942. In the same building, a secondary school was opened in 1947. After this point, more schools were opened, such as commercial secondary schools, industrial secondary schools etc. The aforementioned schools were only for males. Formal education for females only followed later. In 1966, King ‘Abd al-‘Azīz released a decree to open female schools in al-‘Aḥsā’. The first girls’ primary school was opened in one of the palaces of ‘Abd al-Muḥsin ibn Jalawī, who was the prince of al-‘Aḥsā’ at the time.

Prior to the official system of education, which started in 1937 for males and in 1966 for females (al-‘Yarīb, 1988, pp. 246–259), there were several modalities of instruction in al-‘Aḥsā’ differing according to the age and level of learners. Children would originally attend *katātīb* ‘religious literacy schools’, young people went to religious schools, and the public used to take lessons in mosques, and *majālis* ‘sheikhs’ house receptions’ (cf. al-Ḥulaybī, 2003, pp. 29-32). As will be seen below, the primary aim of the *katātīb* was to cultivate religious literacy, i.e. the ability to recite the Quran. More advanced modalities of instruction were further intended to expand religious-based knowledge, covering topics including *tajwīd* ‘the rules of proper pronunciation during Quran recitation’, *tafsīr* ‘interpretation of the

⁷ The government lent the building to the school, but Sa‘ūd ibn ‘Abd allāh al-Jalawī, the prince of al-‘Aḥsā’, asked the police to repossess the building and use it as a police centre (an-Naḥḥās, 2007).

Quran', *ḥadīṯ* 'the sayings of the Prophet', Arabic linguistics and literature, and history. Generally, both male and female children had equal opportunities to gain religious literacy, although males had a better chance than females to expand their education at later age stages. Sunnis and Shiites had separate though equivalent opportunities to gain basic and more advanced education, except for Shiite village-dwellers, who lacked access to more advanced religious-based schools.

Prior to official education, young learners attended *katātīb*, which is a traditional religious system in the Gulf, where the (male or female) *muṭawwaʿ* or *mulla* teaches reading, writing and the Quran (al-Ḥirz, 2001). Since religious subjects in official schools are taught nowadays based on the Sunni Ḥanbalī School, Sunni children no longer attend *al-katātīb*. However, Shiite children are still sent to the *ḥusayniyyāt* 'Shiite religious sites' to receive their own religious education (Abū ʿAṭiyyah, 1976 as cited in al-Ḥulaybī, 2003, p. 30). The male *muṭawwaʿ* used to teach only boys; whereas the female *muṭawwaʿah* used to teach both boys and girls at least until boys reached the age of nine, who were then sent to the male *muṭawwaʿ* (al-Ḥirz, 2001).

After the *katātīb* stage, learners used to go to religious schools, which were funded by endowments. At these schools, they would learn religion, Arabic, and history from Sheikhs, who further gave lessons to the public (al-Ḥulaybī, 2003, p. 30). Both Sunnis and Shiites had religious schools in the capital city al-Hufūf; unlike Shiites, Sunnis also had small schools in some large villages (Lorimer, 1975a, p. 821). Examples of such schools are Al-

Qubbah (founded 974 AH/1566 CE), al-Šalhūbiyyah (founded 1183 AH/1769 CE), aš-Šahārnah (founded 1200 AH/1785 CE), aš-Šarīfah (founded 1304 AH/1887 CE), and aš-Šāliḥiyyah (founded 1328 HA/1910 CE) (cf. al-Ḥulaybī, 2003, pp. 30–31). These means of education were available solely to males. Females had the chance to learn more advanced topics only if they were wealthy or daughters of sheikhs or teachers (cf. al-Ḥulaybī, 2003, p. 33).

As can be seen from the above, males' access to formal education (from 1924/1937 onwards) significantly preceded females' education (from 1966 onwards). This can be expected to have an influence on the speech of elderly speakers in present day al-'Aḥsā'. We would not expect to find females above the age of 70 who have received any type of formal education. However, this should be considered as a relativistic conclusion; while some male schools were open prior to female schools, this does not necessarily indicate that all males had the opportunity to attend, nor did all females go to the schools once they had opened. This was found with some of the participants of the present study. For instance, one participant was an illiterate male Shiite farmer aged 52 years old and another was a stay at home Shiite female aged 48, who was also illiterate.

In terms of higher education, the School of Constitutional and Islamic studies was inaugurated in 1401 AH/1981 CE (aš-Šubāṭ, 1989, p. 131), which is a branch of al-'Imām Muḥammad ibn Sa'ūd Islamic University. This school has separate sections for males and females. Meanwhile, the Junior College of Technology was founded in Riyadh in 1989 and it has branches in

both al-ʿAḥsāʾ and Abḥā (Sallum, Makki, & Go, 1995, p. 49). The al-ʿAḥsāʾ Junior College of Technology similarly has separate sections for males and females.

King Faisal University was founded in 1975 (al-Farsy, 1991, p. 257). It used to have two campuses, one in al-ʿAḥsāʾ and the other in ad-Dammām. The al-ʿAḥsāʾ campus of King Faisal University (which kept its name) is now separated from ad-Dammām campus. When the al-ʿAḥsāʾ campus of King Faisal University began, it had the College of Agriculture (both males and females but in separate majors) and the College of Veterinary Medicine (cf. Rashid & Shaheen, 1995, p. 129). King Faisal University has substantially expanded over the years to include many colleges such as the College of Education, the College of Arts, or the College of Information and Technology. There are still some colleges in King Faisal University that only accept male students, such as the College of Veterinary Medicine and the College of Engineering. Other higher institutions inaugurated relatively more recently are the King Saʿūd ibn ʿAbd al-ʿAzīz University for Health Sciences (2005), which accepts only females, and the Arab Open University (2003), which has separate departments for males and females. Many of the professors at universities in al-ʿAḥsāʾ are of non-Saudi origin, coming from countries such as Egypt, Syria, India, Canada, or the United States.

The above information demonstrates that higher education has become widely developed in al-ʿAḥsāʾ. In al-ʿAḥsāʾ, as is the case in Saudi Arabia in general, education has been shown to be characterised by a severe male and

female segregation both in the past and at present. In relation to socio-sectarian affiliation, Sunnis and Shiites have relatively equal opportunities in all forms of education, except for university religious majors, which are based on the Sunni Ḥanbalī School, in which only Sunnis are found. During schooling years, Sunni and Shiite students may or may not be intermixed, with the degree of mingling being largely dependent on the location of schools and their proximity to Sunni or Shiite neighbourhoods, or both. Higher education levels provide better chances of intermingling, not only between urbanite Sunnis and Shiites, but also between Bedouins, and Sunni and Shiite village inhabitants.

2.9 Conclusion

As has been shown in this chapter, al-ʿAḥsāʾ is a governorate located in eastern Saudi Arabia, which has a population of approximately one million people. Residents of al-ʿAḥsāʾ may be divided into two socio-sectarian affiliations, namely Sunnis and Shiites. It is widely claimed that the majority of Shiites are descendents of Banī ʿAbd al-Qays tribe, who migrated into this area in ancient times and lost evidence of their genealogy due to long sedentarisation processes. They later intermingled with Najdī migrants who converted to Shiism. Sunnis, on the other hand, consist of a minority of the original inhabitants of al-ʿAḥsāʾ, i.e. Banī ʿAbd al-Qays, a large group of Najdī migrants, and some groups whose origin is not verified to be tribal.

In the past, there was a clear divide in terms of the occupations held by different groups of people, leading to strong social ties within each group and

ultimately to the preservation of local linguistic features. Nowadays, different groups are increasingly intermixed in jobs, apparently resulting in greater linguistic accommodation and levelling than in the recent past. Education has also substantially changed from the recent past, with a rapid shift being witnessed from illiteracy and limited religious-literacy education to the wide spread of schools and higher education institutions. This has not only resulted in an increased exposure to Modern Standard Arabic, but also into the creation of a more blended society, facilitating increased linguistic accommodation.

Chapter 3 The historical linguistic context of al-ʿAḥsāʾ Arabic

3.1 Introduction

Al-ʿAḥsāʾ Arabic belongs to the Gulf dialects, which are spoken in Iraq, Kuwait, eastern Saudi Arabia, Qatar, Bahrain, the United Arab Emirates, and Oman. Gulf dialects are considered examples of Neo-Arabic (also known as new-Arabic) dialects, as distinct from Old Arabic, i.e. pre-Islamic and early Islamic literature, and Classical Arabic, i.e. the codified form of Old Arabic. Arabic belongs to the Semitic language family, which is a branch of Afro-Asiatic. The main purpose of this chapter is to enable an understanding of each of these classifications, i.e. see how al-ʿAḥsāʾ Arabic fits into the overall typology of Arabic/Semitic/Afro-Asiatic languages. Placing al-ʿAḥsāʾ Arabic within its broader linguistic context both historically and geographically will increase our understanding of its linguistic aspects, as well as relevant hypotheses of linguistic variation and change.

In this chapter, information is provided regarding the linguistic varieties which are antecedent to al-ʿAḥsāʾ Arabic (see section 3.2). This includes a brief description of selected common linguistic features of Semitic languages, existing subgrouping within the Semitic language family, as well as the position of Arabic within this family. Section 3.3 then includes a detailed discussion of Old Arabic and its relationship with pre-Islamic vernaculars and Classical Arabic, theories on the relationship between Old Arabic and Neo-Arabic varieties, the schematisation of Neo-Arabic dialects and how they co-exist with Modern Standard Arabic, and the distinctive

linguistic aspects of al-ʿAḥsāʾ Arabic and how it is situated within Neo-Arabic dialects.

3.2 Arabic within Semitic and Afro-Asiatic languages

Prior to Islam, the Arabic language was primarily spoken in the Arabian Peninsula and the Fertile Crescent (cf. al-Jallad, 2012). After the rise of Islam, Arabic spread widely, including areas in western North Africa, Djibouti, Comoros, Chad, Somalia, Cyprus, and Uzbekistan. The Arabic language belongs to the Semitic group of languages, other prominent examples of which include Hebrew, Aramaic, Akkadian, and Amharic. Common Semitic features are tri-consonantal root systems (Bennett, 1998, p. 62), emphatic (i.e. ejective or pharyngealised) consonants (Goldenberg, 2013, p. 64), a preference for parataxis or the use of coordinate rather than subordinate constructions, two major conjugations of verbs, one prefixing, one suffixing (Versteegh, 2001, p. 11), and a simple two- or three-way case system (Hasselbach, 2013, p. 16). Semitic languages are considered part of the Afro-Asiatic phylum which includes the African language families Berber, Ancient Egyptian, Cushitic and Chadic (Lipiński, 2013, pp. 259–260).

Blazek (1999, p. 52) claims that there are two conflicting hypotheses regarding the homeland or *Urheimat* of Afro-Asiatic speakers: that the homeland of Afro-Asiatic was in north-east Africa; or in west Asia. The exact homeland of proto-Semitic people is also widely debated. Scholars have argued their origins as being North Africa or the Arabian Peninsula (cf. Shah,

2008, p. 263), or Mesopotamia and Syria-Palestine (Ehret, 2011, p. 140; Holes, 2004, p. 10).

There is no universal consensus regarding the subgrouping of the Semitic language family. In fact, genetic models based on comparative linguistic methods, such as those originally applied to Indo-European languages, have been questioned in terms of their applicability to Semitic languages on grounds that shared similarities may be ascribed to areal and contact influences rather than to ancestral relatedness (cf. Faber, 1997, p. 3). In order to deal with such objections, it has been suggested that the construction of Semitic subgroupings should be based on shared innovations that are highly unlikely to be derived from convergences, geographical adjacencies, or chance (Faber, 1997, p. 4). Hetzron (1976) proposed that morpholexical innovations are considerably more likely to meet this criterion than phonological ones, and as such that they are of primary importance in building the family tree of Semitic languages. The main body of Hetzron's model remains widely accepted today. Rubin (2008, p. 2) gives Hetzron's classification scheme with some refinements related to Old South Arabian languages and the Central Semitic subgroup, shown in Figure 1.

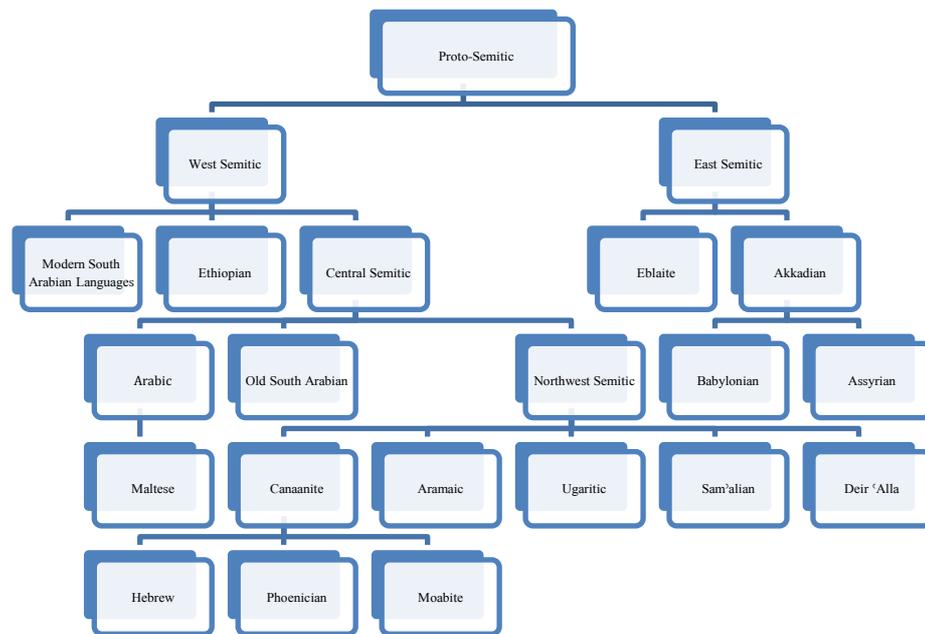


Figure 1 The subgrouping of the Semitic language family (Rubin, 2008, p. 2)

According to Rubin (2008, p. 62), the main divide between East and West Semitic groupings is based on an innovation shared by West Semitic languages represented by the move from prefixation to suffixation in the conjugation of past tense verbs, e.g. *qatal-a* replaces proto-Semitic *ya-qtul* ‘he killed’.

Underlying the East Semitic subgroup lies the oldest attested Semitic language, namely Akkadian, which was used in Mesopotamia between approximately 2500 and 600 BCE (Versteegh, 2001, p. 9). From 2000 BCE onwards (Versteegh, 2001, p. 9), two varieties of Akkadian can be distinguished: Assyrian and Babylonian (Rubin, 2008, p. 63). Examples of Eblaite have been located in the south of Aleppo, dating from 2500–2300 BCE (Versteegh, 2001, p. 9). Eblaite is classified as East Semitic, as it shares a number of morphological isoglosses with Akkadian, such as the locative

case *-um*, and the postpositions *-in* and *-ana* (Rubin, 2008, pp. 62–63). Although some researchers consider Eblaite to be an Akkadian dialect, it is more widely considered as being a separate branch of East Semitic because it lacks an innovation shared by all Akkadian dialects, namely the dissimilation of word-initial /m/ into /n/ when followed by any vowel other than /u/ in words that contain another labial sound, e.g. *narkabtum* (Old Babylonian Akkadian) < *markabtum* ‘chariot’ (Rubin, 2008, p. 63). Within Akkadian, Assyrian has the subordinate suffix *-(u)ni* which is missing in Babylonian (Streck, 2011, p. 368). The West Semitic group is divided into Modern South Arabian languages, Ethiopian, and Central Semitic. The main characterizing linguistic feature of Central Semitic is the development of the imperfective verbal suffixes *-u* post-consonantly and *-na/-ni* post-vocally (Rubin, 2008, p. 64). It includes Arabic, Old South Arabian languages and Northwest Semitic. Northwest Semitic languages are/were spoken in the Syro-Palestinian Area. They are typified by common innovations such as the replacement of initial /w/ with /y/, and the use of the pattern CVCC for the double plural marking of nouns (Rubin, 2008, p. 76). Ugaritic (1400 and 1300 BCE) was spoken until the end of the second millennium BCE when Aramaic and Canaanite started to develop (Versteegh, 2001, p. 9). The Canaanite group of languages (comprised of Hebrew, Phoenician and Moabite) shares developments including the $\bar{a} > \bar{o}$ shift, and the levelling of the 1cp suffixed pronoun *-nu* in all parts of speech (Rubin, 2008, p. 71). Sam’alian was spoken from the 8th Century BCE (Gzella, 2014, p. 74), as was Deir ‘Alla (Lipiński, 1975, p. 104). For details on the division of linguistic features within Northwest Semitic, see Rubin (2008, pp. 70–73). Northwest Semitic

languages also include Old South Arabian languages, which started to emerge at the beginning of the first Millennium BCE (Kogan & Korotayev, 1997, p. 220), but were replaced by Arabic by the 6th century CE (Hetzron, 1990b, p. 161), and Modern South Arabian languages, which are not considered descendants of Old South Arabian languages (Hetzron, 1990b, p. 160), since developments present in Old South Arabian languages, e.g. the definite article *-(h)n*, are missing in Modern South Arabian languages (Rubin, 2008, p. 69). This feature also makes Old South Arabian languages distinct from Arabic and Northwest Semitic languages. Modern South Arabian languages are considered a distinct branch in West Semitic. Their main innovation is the prefixed definite article *C(a)-* with C being either /ʔ/, /h/, or /ħ/ (cf. Faber, 1997, p. 11). Modern South Arabian languages are today spoken in some parts of Yemen, Oman, Saudi Arabia, and a group of islands south of the Arabian Peninsula, the largest of which is Soqatra. Another branch of West Semitic languages is Ethiopian, a diverse group of languages that includes Gəʿəz, Amharic, Argobba, Harari and so forth (cf. Hetzron, 1972). Gəʿəz is considered the oldest attested variety of the Ethiopian language family, and is attested in the first millennium BCE (Gragg, 1997, p. 242). One of the distinguishing features of Proto-Ethiopian is the existential verb **h/w* (Amharic *allā*), which indicates present tense but takes the perfect form, and which co-occurs with temporal prefixes (Amharic *s-*) that usually co-occur with imperfect verbs (Hetzron, 1972, p. 18 & Hetzron, 1975).

Arabic is often considered the model for the reconstruction of Proto-Semitic languages because of its historical stability and high conservatism

(Greenberg, 1974, p. 63; Simeone-Senelle, 1997, p. 382). This is especially reflected in its retention of the declensional system and some archaic consonants such as the interdentalals /ð/ and /θ/, the velars /x/ and /χ/, and the pharyngeals /ħ/ and /ʕ/ (Versteegh, 2001, pp. 16–19). Nonetheless, Arabic has undergone some independent innovations of its own, such as the use of nunation to mark indefiniteness, *ʾl-* as a definite article, and the internal passive *fuʿīla* form (cf. Versteegh, 2001, pp. 20–21).

There is no *communis opinio* on the position of Arabic within the West Semitic group. According to one view, it is associated with northwest Semitic languages based on a shared innovation in the use of the verbal form *yaqtulu* ‘he is killing’ (Hetzron, 1976; Huehnergard, 1990, p. 283). An alternative view places Arabic with Modern South Arabian languages and Ethiopian because they all share a number of linguistic aspects, such as the use of broken plurals and the development of the verbal theme *qātala* ‘he continuously fought’ (Joshua Blau, 1978, p. 30). However, these features are considered by others to be retentions from Proto-Semitic (Rubin, 2008, p. 66) that were later subject to convergence or diffusion (cf. Faber, 1997, p. 13). Further sub-classifications within the Arabic language will be provided in the next section. First, linguistic varieties claimed to be associated with Arabic, viz. Ancient North Arabian and Nabataean, will be discussed.

Ancient North Arabian inscriptions dated between the eighth century BCE and the fourth century CE in central and north Arabia, as well as in the southern parts of modern Syria and Jordan, show evidence of groups of

nomads and settled speakers who used a number of interrelated dialects (Macdonald, 2004, p. 490) that may be divided into Oasis North Arabian, Şafaitic, Ḥismaic, Thamudic and possibly Ḥasaitic (Macdonald, 2000, p. 29). These dialects are characterised by the use of *h(n)-* (or zero) as a definite article as opposed to Classical Arabic *ʾal-* (Macdonald, 2000, p. 29). Ancient North Arabian dialects are sometimes falsely considered as being versions of Proto-Arabic due to certain shared linguistic features that distinguish them from other Semitic languages. However, they are more likely to be distinct varieties because they are differentiated by a larger number of linguistic aspects (cf. Macdonald, 2000, pp. 29–30, 2004, p. 488). Rubin (2008, p. 67) sketches their relationship as shown in Figure 2.

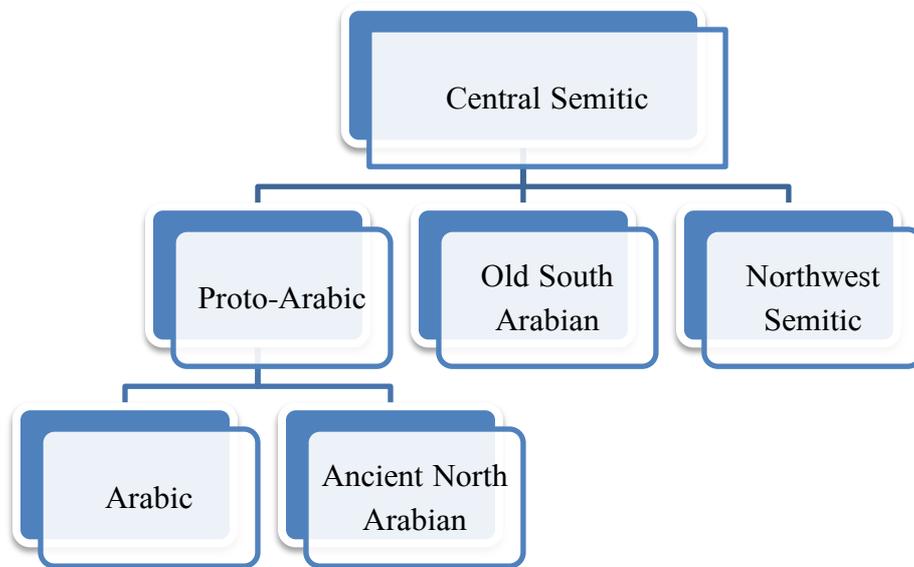


Figure 2 Arabic and Ancient North Arabian

Another variety claimed to be related to Arabic is Nabataean, which was spoken in North Arabia. Based on the presence of Arabic-loan words and proper names, Nabataean inscriptions are usually considered indicative of a spoken form of Arabic written using Aramaic orthography (cf. Macdonald, 2000, pp. 46–47). However, Macdonald (2000, pp. 46–48) argues that Nabataean is not an Arabic variety and may possibly be an Aramaic dialect. This view is supported by the relatively small number of Arabic loan-words in Nabataean scripts, which are almost entirely found in Ḥagrā or Rawāfa inscriptions found in north Arabia dated to the 1st century CE. This seems more likely to attributable to influence by Old Arabic and Ancient North Arabian, as opposed to earlier Nabatean inscriptions found in Petra. Furthermore, proper names, especially those related to religion, have a unique linguistic chronological survival tendency, which does not make them good sources of evidence for linguistic typologies.

3.3 The Arabic language

The earliest attested mention of the root which in written and contemporary spoken Arabic means ‘Arab’ – ‘*rb*’ – is found in the monolith inscriptions from Kurkh describing the 6th regnal year (853 BCE) of the Assyrian king Shalmanaser III (Eph‘al, 1982). During this year, Shalmanaser III underwent a battle at Qarqar against a coalition of Levantine kings; one of whom was described as Gindibū the ‘Arab who brought 1000 camels with him (*l im^{anše} gam-ma-lu ša^m Gi-in-di-bu^{kur} Ar-ba-a-a*) (Eph‘al, 1982, p. 21). Gindibū of Arabia seemingly inhabited an area close to the Assyrian province of Haurina (Ḥawrān) in the Levant (al-Jallad, 2012, p. 5; Retsö, 2005, p. 127). Ancient sources have shown that, prior to the 2nd century CE, non-Arabic writers used the term ‘Arab as a literary topos or an ethnonym referring to a large group of people inhabiting different parts of Egypt, the Levant, Mesopotamia, the Arabian Peninsula, and Iran (Macdonald, 2009, pp. 280–285). They are also said to have had various professions, e.g. merchants, kings, guards, or peasants (Macdonald, 2009, pp. 280–285). Evidence from Ptolemaic and Roman Egypt has shown that the word ‘Arab was used to refer to nomadic pastoralists (Honigman, 2002, p. 56). The ethnonym ‘Arab did not merely entail geographical locations, occupations, or ways of life, but it most importantly indicated a “a complex of language and culture” (Macdonald, 2009, p. 296). Since the term ‘Arab is considered a loanword in Greek and many Semitic languages, it can be perceived as a form of self-designation borrowed by other nations. In this regard, it must be noted that from the time the word ‘Arab was first attested in the 9th century BCE till the rise of Islam

in 7th century CE, the term ‘Arab was rarely used for individual self-labelling (Macdonald, 2009, p. 285), instead being used to imply the community or the group to which individuals belonged (Retsö, 2005, p. 105).

Unfortunately, little information is available regarding the linguistic variety these ‘Arab spoke. The earliest attested script which is unequivocally a form of Arabic, written in Sabaic orthography, was that of ‘gl bn Hf̄m found in Qaryat al-Faw dating to the first century CE (Macdonald, 2000, p. 50). The inscriptions showed Arabic features, such as the use of the definite article *ʾl-*, the *ʾlY* pattern, and the preposition *mn* (Macdonald, 2000, p. 50). However, Arabic was essentially a spoken language until the late fifth and early sixth century CE (Macdonald, 2000, p. 36).

The oldest most extensive literature of Arabic was used during the one or two centuries prior to the rise of Islam (al-Jindī, 1983, p. 33) in the 7th century CE until the Arabic conquests. This literature is often termed Old Arabic or “the ‘Arabiyya as the uniform language of the Bedouin tribes, the Qur’ān, and pre-Islamic poetry” (Versteegh, 2001, p. 98) whose codified form is called Classical Arabic. Definitions like this seem to oversimplify things *a priori*. The dialects of Bedouin tribes were not uniform in their own right nor did they necessarily match Classical Arabic in every linguistic aspect. Furthermore, their poetic language is representative of a specific genre that does not ideally mirror everyday communication. Also, the Quran itself is linguistically variable and does not abide to the norms of any single dialect. The language of the Quran is also a form of elevated speech that does not

mirror common colloquial norms. This leads us to question the sources of Classical Arabic in terms of how they mirror pre-Islamic vernaculars. Each of these aspects will be discussed in detail below.

The following paragraphs discuss the features that Arab grammarians utilise in differentiating dialects found in pre- and early-Islamic poetry. This language is said to be part of a *poetic koiné*, a stylistic register that radically differs from everyday speech (more details on this will be given later in this section). In order to facilitate understanding of the linguistic differences between Arab tribes, some broad genealogical classifications need to be provided. Ibn Xaldūn (*Tārīx*, pp. 335–351) claims that Arabs may be genealogically and chronologically divided into four levels: *al-ʿArab al-ʿāribah* ‘authentic ‘Arabs’, including *al-Bāʿidah* ‘extinct Arabs’, which refers to nations such as ʿĀd, Ḥamūd and Ṭasam; *al-ʿArab al-mustaʿribah* ‘Arabised Arabs’ also called Yemeni Arabs, who solely trace descent from Qaḥṭān; *al-ʿArab at-tābiʿah lil ʿArab* ‘the Arabs who follow the Arabs’, including Qudāʿah, Qaḥṭān, and ʿAdnān; and *al-ʿArab al-Mustaʿjamah* ‘foreignised Arabs’, including Berbers. *Al-ʿArab al-Bāʿidah* ‘extinct Arabs’ may denote the speakers of Ancient North Arabian Languages which, as discussed earlier, are considered to be a separate branch within proto-Arabic. *Al-ʿArab al-Mustaʿjamah* ‘foreignised Arabs’ are more associated with Neo-Arabic varieties, e.g. Maghrebi dialects. Of main interest to the discussion of Old Arabic are the remaining two strata which are *al-ʿArab al-mustaʿribah* ‘Arabised Arabs’, and *al-ʿArab at-tābiʿah lil ʿArab* ‘the Arabs who follow the Arabs’ which, for simplification, will henceforth be labelled Southern and

Northern Arabs respectively. Northern dialects are subdivided into western sedentarised Ḥijāzī dialects and eastern Bedouinised Tamīmī dialects (cf. Rabin, 1951, p. 1).

Versteegh (2001, p. 37) considers linguistic aspects of all these dialects to be equally accepted by grammarians and used in poetry. Nonetheless, even though specific tribally oriented linguistic features have survived in poetry (al-Jallad, 2012, p. 48), one of the major sources of pre-Islamic corpus, this should not entail that they were all evenly endorsed by grammarians and henceforth implemented in Classical Arabic codification. Furthermore, the fact that many years of oral transmissions have passed from the time these poems were originally composed until they were orthographically recorded have made them subject to constant revisions, leading us to be sceptical about the preservation of their original linguistic aspects (Holes, 2004, p. 11). As put by Rabin (1955, p. 21),

[b]oth pre-Islamic and early Islamic poems have been revised by editors, as can be seen not only from the extensive variants, but also from the not infrequent cases where verses are quoted by grammarians for some linguistic oddity, while on looking up the *Dīwān* [poetry collection] we find the same line slightly reshaped so that the oddity is eliminated.

Known linguistic variations in between tribal groups show that while it is claimed that the language of poetry is dominated by conservative eastern dialects (Holes, 2004, p. 13; Rabin, 1951, p. 1), it is not strictly adherent to it. The decisions of Medieval Arab Grammarians' on what is standard or not

were not entirely confined to eastern dialects, which are primarily used by Bedouins, because they considered them to be more conservative than other dialects, which are more commonly used in towns. Examples of heterogeneous linguistic features found in southern, eastern and western dialects will be given below; noting that features which coincide with Classical Arabic will be given in **Bold**.

According to al-Sharkawi (2010, pp. 44–45), southern dialects are characterised by **absence of 'imāla 'inclination'**, i.e. /ā/ raised to [ē], **the preservation of hamzah 'the glottal stop'**, e.g. *'aṭa'tu* 'I obeyed', and the use of *dū* as a negative particle, *am-* as a definite article, e.g. *mani m-qā'imun* 'who is standing', and *-k* as a first and second person suffix of perfective verbs, e.g. *ra'ayku* 'I saw'. It should be noted here that the negative particle *dū* has another reflex viz. *da'* which may be a vestige of a Himyaritic substrate (al-Sharkawi, 2008, p. 694). Similarly, the definite article *am-* may stem from Himyaritic (Zammit, 2002, p. 35). In addition, the *-k* perfect may possibly be relic of a substrate language which may either be the Himyaritic language (Holes, 1991, p. 663), or one of the Modern South Arabian languages (Kaye & Rosenhouse, 1997, p. 292). Having possible influences coming from other Semitic languages of southern Arabia may explain why the last three features were not considered in the systemisation of Classical Arabic.

As regards northern dialects, al-Jallad (2012, pp. 47–48) cites examples of differences between eastern and western dialects. For instance, **the glottal**

stop is preserved in eastern dialects, e.g. *ruʿūsun* ‘heads’, but has been lost in western dialects, e.g. *rūsun*. The **preformative vowel /a/** is also used in western dialects, e.g. *naʿlamu* ‘we know’, but is realised as [i] in eastern dialects, e.g. *niʿlamu*. In addition, **vowel harmony** is present in eastern dialects, e.g. *bi-dārihim* ‘in their house’, but absent in western dialects, e.g. *bi-dārihum*. There is also **no assimilation of /a/** in western dialects, e.g. *ḍaḥika* ‘he laughed’, as found in eastern dialects, e.g. *ḍiḥika*. Furthermore, the **internal passive /ī/** in western dialects, e.g. *qīla* ‘it was said’, is realised as [ū] in western dialects, e.g. *qūla*.

Nonetheless, al-Jallad (2012, pp. 51–53) casts some doubt on certain associations between linguistic reflexes and tribal dialects, citing an example of the distal demonstratives *ḍālika* and *(ha)ḍāka*, ascribed to the western and eastern dialects respectively. It can therefore be argued that the form *ḍālika* was considered a western feature (cf. Rabin, 1951, p. 154) merely because it occurred in the Quran, and that both *ḍālika* and *(ha)ḍāka* occurred in eastern dialects (al-Jallad, 2012, p. 51). In support of this skepticism, Zwettler (1978, p. 111) argues that poetic language not only reflects the tribal dialect of the poet, but also their choice, from an admixture of diverse Arabic dialects, of the linguistic reflex that would satisfy metrical requirements.

The presence of linguistic heterogeneity in Old Arabic poetry implies archaism and closeness to the ancestral system (cf. Hetzron, 1976). It may also be considered indicative of potential processes of linguistic change. Concerning this, al-Jallad (2012, pp. 51–53) suggests the possibility of

different stages of diachronic developments occurring across tribal dialects. This is exemplified by the presence of *đihī* ~ *đihi* ~ *đih* ~ *đī* ‘this’ reflexes in poetry, which can be perceived as a staged historical sound change from left to right; where two historical sound changes are involved *viz.* the apocope of /i/ and /h/ as well as the elongation of the final vowel to maintain the weight of the syllable.

Aside from the linguistics differences that are claimed to exist between southern, eastern and western pre-Islamic Arabic groups, many researchers consider pre-Islamic poetic language to be part of a *poetic koiné*. The grammarians’ ‘Arabiyyah was largely based on this standard poetic language, which does not necessarily match any single dialect (Ferguson, 1959b, pp. 616–617). Brocklemann (1908, p. 24) was probably the first to distinguish between a pre-Islamic poetic style, which he calls *Dichtersprache*, and tribal vernaculars. Zwettler (1978) in his book *The oral tradition of Classical Arabic poetry* has thoroughly dealt with the notion of poetic koiné. He holds that the synthetic or quasi-synthetic Arabic language based on poetic renditions, which were a major source for Classical Arabic grammar systemisation, was orally formulaic, and essentially different from the more analytic casual forms of the numerous urban and sedentary dialects. To support his argument, Zwettler (1978, p. 110) gives, *inter alia*, some examples of *đarūrāt aš-šīr* ‘poetic licenses’ (as cited from Jacob, 1967, p. 199) such as the suffixation of *-ū* to the masculine plural pronouns of the 2nd person, e.g. *’antum-ū*, and the 3rd person, e.g. *hum-ū* ‘they’, in contexts other than those permitting liaison with *’alif al-waṣl*. Zwettler (1978, pp. 97–110) argues that these features are

proto-forms that are missing in prose; drawing a parallel between the language of Arabic poetry and the Greek Homeric language, which is considered to be composed, artificial, and non-existent in everyday speech. In a less strict line of argument, Holes (2004) states that “whatever th[e] “pure” spoken Arabic was, it was unlikely to have been identical in syntax or vocabulary with the poetical ‘arabīya’” (p. 28), but Holes (2004, p. 13) also posits that pre-Islamic poetry represents merely an elevated ‘poetic style’. In addition, al-Jindī (1983, pp. 35–36) states that colloquial features used by each tribe were most likely to be avoided both in poetry and in speeches held in famous Arab markets (al-Jindī, 1983, pp. 35–36). Furthermore, as stated earlier in this section, Rabin (1955, p. 21) argues that while pre-Islamic poems are authentic as a whole, they were modified by editors to avoid ‘oddities’ which, although absent in anthology, are often quoted by grammarians.

In relation to the systemisation of Classical Arabic and its relationship with poetic style, major Arab grammarians have acknowledged the linguistic differences between poems and regular speech. For instance, Sibawayh initiated his book with the general principle, i.e. what applies to poetry does not necessarily apply to speech (Kitāb, Vol. 1, p. 26). Sibawayh also dedicated a whole section for what is permissible only in poetic language (cf. Kitāb, Vol. 1, pp. 26–32). Nonetheless, although Sibawayh made a significant step into scientific inquiry through the use of actual informants as a primary source of grammatical description (Levin, 1998, p. 214), his selection of informants was restricted to Bedouin speakers, whose speech was after all

primarily judged against poetic standards (al-Jallad, 2012, p. 39). Medieval Arab grammarians also gave some consideration to *luyāt* often translated as ‘dialects’, which were not considered as discrete, but as part of a single language. However, in Sibawayh’s work, the term *luyāt* was also used to signify “a single non-standard word, speech, a provincialism, non-technical usage of words, [or] non-standard constructions” (al-Jallad, 2012, p. 47). In other words, *luyāt* have mainly functioned as “pigeonholes into which constructions incompatible with standard usage were placed” (al-Jallad, 2012, p. 47).

Another major source of Old Arabic is the Quran, which was revealed during the early 7th century CE to the Prophet Muhammad. It was mainly recited orally until the time of the caliph ‘Uṯmān ibn ‘Affān. During his reign, the Islamic empire expanded substantially to reach the Levant, Iraq, Egypt, and North Africa. According to al-Jallad (2012), the Arabic language was already part of the scene in the settled areas of the Levant and Mesopotamia prior to their islamisation. Holes (2004, pp. 19–22) provides a description of the remaining population, explaining that there were also some Arabic speaking nomads mainly in the steppe of the Levant, many of whom gradually became sedentarised, as well as on the western sides of Mesopotamia. In the Levant, some of the indigenous population spoke Aramaic. In Iraq, a part of the sedentary population spoke Eastern Aramaic dialects along with some pockets of sedentary and nomadic Persian-speaking groups. As to Egypt, Coptic was spoken by the majority of the population in addition to some nomadic Arabs in the north-eastern parts; a large group of

whom later became settled in towns. To the west of Egypt, Berber was used by both the urban and rural populations. In all of these areas, Greek was generally used by government official in cities.

After the Arab conquests, the Caliph was afraid that the original content of the Quran would be distorted by the readings of non-native speakers of Arabic. He therefore decided, with the sanction of the Prophet's companions, to approve the initial version gathered by the first Caliph 'Abu Bakr aṣ-Ṣiddīq, which was in the custody of Ḥafṣah, the daughter of the second Caliph 'Umar ibn al-Xaṭṭāb. 'Uṯmān asked some of the Prophet's companions to make copies of the first version. Scribes were required to resort to the dialect of Qurayṣ whenever they disagreed on something. 'Uṯmān afterwards circulated copies of the approved version to main Islamic centres requesting the other versions to be burned.

In relation to the dialect used in the Quran, some claim that most of the Quran was revealed in the dialect of the Prophet's tribe, Qurayṣ, which already enjoyed a prestigious status prior to Islam (cf. al-Sharkawi, 2010, pp. 33–34). Others posit that Quranic language is made of numerous dialects (Zwettler, 1978, p. 111). The latter view seems more accurate, as linguistic features not present in the Qurayṣī dialect are commonly noted. For instance, there were several cases where Qurayṣī companions were unable to discern the meaning of certain words that were attributed to other dialects. 'Abd Allāh ibn 'Abbās is said to have not been able to understand the meaning of the word *fāṭir* 'initiator' until he heard it used in context by other dialect

speakers. The use of the 1st person singular possessive pronoun *-ya*, attested today in al-ʿAḥsāʾ dialect (see Chapter 9), as opposed to Qurayṣī *-ī* as represented by a few instances in the Quran, e.g. *kitāb-iyah* ‘my record’ (Quran, chapter 69, verse 19), is also indicative of dialect mixture.

It may also be argued that the Quran was revealed with alternating dialectal forms. This is supported by a narration on the authority of ibn ʿAbbās that the Prophet said that Jibrīl ‘Gabriel’ recited the Quran to him in one way. He had then requested that it be recited in another way. The Messenger of Allāh continued asking for more, until Jibrīl recited it in seven different *ʾaḥruf* (lit. ‘letters’) [al-Buxārī and Muslim]. Traditionally, the term *ʾaḥruf* has been associated with seven dialects, namely Qurayṣ, Ṯaqīf, Tamīm, Huḍail, Hawāzin, Kinānah, and Yemen. Dialectal recitations other than the Qurayṣī one may have been burned during the reign of ʿUṯmān. It is also possible that remnants of these are still present in the seven or ten different eighth-century *qirāʾāt* ‘modes of Quranic recitation’ which are said to have been transmitted by chains of reliable narrators traceable to the Prophet’s companions, albeit being modified whenever they departed from the codified canonical copy of the Quran.

What can be deduced from the above is that the language of the Quran is intrinsically diversified and does not reflect a single spoken variety. In terms of how grammarians used the Quran as a source of codification, it seems that although the rules of standard Arabic were derived from the Quran, they nevertheless do not adequately explain all of its language. In this

regard, Sībawayh noted several syntactic constructions that breach rules postulated, but he considered them permissible only in the Quran or poetry; implying that they are not intended for every day usage (Carter, 2004, p. 45). An example is the way in which Sībawayh constructs the phrase *'ixtartu I-rijāla 'Abdullāhī* 'I chose the men, 'Abdullāh [in particular]' following the Quranic structure found in "*'ixtāra Mūsā qawmahu sab'īna rajulan*" (Quran, chapter 7, verse 155) 'Moses chose his people, [in particular] seventy men' which is a very uncommon form in regular usage (Carter, 2004, p. 45). Another is the use of the dependent form *kulla* 'all, every' instead of the independent form *kullu*, considered more regular by Sībawayh, in the verse "*'innā kulla šay'in xalaqnāhu bi-qadarin*" (Quran, chapter 54, verse 49) (lit. indeed everything, we have created it by decree) (Carter, 2004, p. 45). As to *qirā'āt*, Sībawayh considered the vast majority of them simply 'wrong' (Carter, 2004, p. 44).

One of the immediate results of the expansion of the Islamic empire was the need to standardise and reify Old Arabic for use as a language of authority and unity. Steps were therefore undertaken to elaborate the existing orthographical model, which was drawn from the Nabatean or (Syro-Aramaic) script (Zwettler, 1978, p. 122), through the use of dots and diacritics to represent short vowels and to mark difference between some phonemes, such as *sīn/šīn* (Versteegh, 2001, p. 55). This was thought to provide a more accurate representation of spoken language than the previously rather vague script, which merges graphemes such as < ج >, < ح >, and < خ >, denoting [j], [h], and [x] respectively. Additionally, the grammatical system of

Classical Arabic was described by grammarians such as 'Abu al-'Aswad ad-Du'ali, Sibawayh, and al-Kisā'i. Descriptions were largely based on conservative 'pure' Bedouin dialects, even though they exhibited variations themselves. Regardless, Bedouins were apparently graded on a scale from trustworthy to unacceptable on the basis of an ideal hypothetical framework (al-Jallad, 2012, p. 45) that was inconsistent in terms of tribal rankings across grammatical works (Rabin, 1951, pp. 20–24). The assumption that Bedouin dialects were more pure because of their relatively isolated lifestyle compared to sedentary dialects was widely held in both pre-Islamic and early Islamic times. This belief was predicated upon the idea that sedentary forms were subject to dialect contact and subsequent 'corrupted' innovations due to the influx of outsiders to towns, especially Makka. This led many people to send their infants to the desert to acquire 'authentic' Arabic. This included the Prophet himself and many children of caliphs at later times. Bedouin dialects were also considered a valid source for the creation of dictionaries, the first of which was *Mu'jam al-'Ayn* (lit. the letter 'ayn dictionary') written by al-Xalil ibn 'Amad al-Farāhīdī, which was expanded and edited by his student al-Layṡ ibn al-Muḏaffar. Despite this, lexicographers were not fixed in their approach and were willing to cope with new expressions through the creation of new inflexions and derivations from existing roots and by borrowing from other languages. By the end of the 1st millennium CE, as their contact with sedentary speakers increased, Bedouins started to lose their linguistic conservatism, leading them to gradually lose credibility as a reliable source of authentic Arabic (cf. Versteegh, 2001, pp. 57–64). This resulted in the

fossilisation of the standardisation process for Classical Arabic (cf. Versteegh, 2001, pp. 57–64).

To summarise the above information, it can be said that each component of Old Arabic, i.e. the speech of Bedouin tribes, poems, and the Quran, was not entirely homogeneous to begin with, but this does not necessarily entail that they were radically distinct. Classical Arabic did not reflect a single variety per se, but was presumably based on a theoretical model of ‘standard usage’. Having different views as regards Old Arabic has led many researchers to develop different positions on how Neo-Arabic varieties came into being. Researchers who consider Old Arabic as homogeneous regard modern Arabic varieties as derivatives of a common origin, which have undergone diachronic linguistic developments, whereas those who consider Old Arabic as heterogeneous will regard modern dialects as potentially retaining proto-features that are not necessarily preserved in Classical Arabic. In the following, some theories which attempt to explain how the so-called Neo-Arabic dialects emerged will be discussed, followed by a classification of Neo-Arabic dialects.

There are many conflicting theories regarding the processes by which modern Arabic dialects arose. Ferguson (1959b) suggests a monogenesis theory in which he claims that all synchronic Arabic dialects derive from a unified spoken military koiné that had existed across the Muslim world during the early centuries of Islam. This claimed koiné originated in city armies, where speakers from different places had come into contact (Ferguson,

1959b). Ferguson posits that similarities between synchronic dialects are residuals of this koiné, whereas differences between them derive from independent innovations and borrowings. He attempts to support his view by citing 14 linguistic isoglosses of this early koiné which he considers to be systematically different from Classical Arabic. Nonetheless, Ferguson's own view of Classical Arabic, as a description based on a 'standard poetic language' which does not necessarily match any specific spoken dialect, does not support his argument. Al-Jallad (2012, pp. 60–61) states that it is unnecessary for Ferguson to make a comparison between modern dialects and Classical Arabic, the latter of which he had already rendered as artificial in nature. In this regard, al-Jallad rules out the koinéisation scenario and instead proposes the existence of a common dialectal predecessor that includes Ferguson's set of linguistic features. Al-Jallad supports this view by saying that Ferguson's set of shared characteristics are innovative in a sense that they cannot possibly be the outcome of levelling and simplification processes, which are usually involved in koinéisation. Ferguson's theory has also been criticised on grounds that shared similarities may alternatively be attributed to general trends or convergence processes (cf. Versteegh, 2001, p. 103).

The development of Neo-Arabic dialects is also explained in terms of several polygenesis theories. One example of these theories was put forward by Versteegh (1984), who claims that Arabic dialects underwent radical reconstructions of the structural system through series of long-term pidginisation, creolisation, and de-creolisation processes. According to this view, the indigenous population of conquered territories verbally

communicated with Arabs by means of a pidgin, i.e. a very simplified version of language resulting from limited contact between speakers of different languages. New generations had to use the limited input provided by their caregivers to construct their own expanded approximation to Arabic, i.e. their own creolised variety. Later, extensive intermarriage relations between these groups and Arabs resulted in the beginning of decreolisation processes, i.e. convergence with the standard input variety. Holes (2004, pp. 23–29) provides several arguments against Versteegh's (1984) hypothesis. First, he states that there is no mention of this assumed pidgin in Arabic literature even though non-Arabs were reported, one or two centuries after the conquests, to commit linguistic errors in what is called *lahn al-'āmmah* 'the solecisms of common people'. He (2004, pp. 23–29) claims that these errors do not reflect a drastic remodelling of the Arabic linguistic system, but rather show early signs of the development of modern dialects. Holes adds that analyses of ephemeral non-literary evidence from Egypt and Syria going back to as early as 800 CE indicate the presence of a fully-fledged linguistic system, with morphological and syntactic variations that mark a transitional phase from Classical Arabic to different modern dialects, thus assuming that modern dialects derive from Classical Arabic. This full system is unlike that found in Juba Arabic, which is a pidgin developed in southern Sudan, nor in its developed creole (Ki)Nubi, neither of which are identified as varieties of the parent Arabic language. Holes suggests instead that Arabic was learned as a foreign language in towns where indigenous people had a chance to interact with Arabs. Their ability to learn Arabic was facilitated by their previous extended familiarity with Arabic as used by nomadic and settled Arab

incomers. Holes also argues that pidgins may have been briefly used in the early times of the conquests, when country-dwelling farmers and traders came in towns and had to interact with Arabs.

In spite of their different views regarding the emergence of Neo-Arabic dialects, Ferguson (1959b), Versteegh (1984, 2001) and Holes (2004, 2006) agree that Neo-Arabic features that depart from Old Arabic are part of processes of linguistic change, rather than retentions from prior forms. On the basis of this assumption, which may not be entirely valid as will be seen later in this section, they cite a number of presumed Old Arabic linguistic changes such as the disappearance of the glottal stop, e.g. *rās* < **ra's* 'head', the merger of /d/ and /ð/ into either /d/ in many sedentary dialects, or /ð/ in all Bedouin and some sedentary dialects, e.g. Syrian Arabic *ḍuhr* vs. Gulf Arabic *ḍəhər* < **ḍuhr* 'afternoon', also Syrian Arabic *ḍəf* vs. Gulf Arabic *ḍəf* < *ḍayf* 'guest', the loss of inflections in the relative pronouns, e.g. Syrian Arabic *(y)əlli* < Classical Arabic *alla-ḍi* 'who m.s.', and the deletion of final short vowels, as well as the shortening of final long vowels, e.g. Syrian Arabic *katab/katabu* < Classical Arabic *kataba/katabū* 'he wrote/they wrote' (Versteegh, 2001, pp. 99–100), loss of the dual in pronouns, adjectives, and verbs, e.g. Cairene Arabic *yəktəbu* < Classical Arabic *yaktubān* 'they m.d. write' (cf. Ferguson, 1959b, p. 620; Holes, 2004, p. 120), *Taltalah* or the use of /i/ instead of /a/ in some affixes, e.g. *ti-ftataḥ* < Classical Arabic *ta-ftataḥu* 'you open' (Ferguson, 1959b, p. 621) among other linguistic changes. According to Versteegh (2001, pp. 99–100), Bedouin/Gulf dialects have remained relatively more conservative than sedentary dialects located in

conquered areas. For instance, Bedouin/Gulf dialects still maintain the interdental spirants which have been replaced by dental occlusives in many sedentary dialects, e.g. Syrian Arabic *talāta* ~ Bedouin/Gulf *θalāθa* ‘three’ (Versteegh, 2001, pp. 99–100). On similar lines, Holes (2006, p. 26) says that Bedouin/Gulf dialects are notable for their retention of *tanwīn* ‘marking noun indefiniteness’, e.g. *bint-in zēna* ‘a nice girl’, the final *-n* in the 2nd person feminine singular *-in* and 3rd plural *-ūn* of imperfect verbs, e.g. *tikitbīn* ‘you 2p.f.s. write’ and *tiktibūn* ‘you 3p. write’, and modal and presentative particles, e.g. *gad* ~ *jid*.

Along parallel diachronic developmental grounds, Blau (1965; 1966, 2002) suggests that Middle Arabic, comprised of literary texts including official and personal letters written by Muslims, Christians and Jews dating to as early as the 8th century CE, forms a missing link between Classical Arabic and Neo-Arabic dialects. Following a detailed analysis of these texts, Blau (1965, pp. 4–5) reaches the conclusion that Middle Arabic, while primarily situated within a Classical Arabic framework, displays various precursors of Neo-Arabic dialects especially in terms of the deletion of mood and case endings. Blau (1965, p. 2) attributes this to early Islamic conquests, which enabled speakers of eastern and western Arabic dialects to intermingle in military camps and to have contact with foreign speakers, who have progressively started to acquire Arabic themselves. According to this perspective, Middle Arabic was characteristic of urban dialects even among the highest classes of Arabs and initially existed alongside literary Classical Arabic and Bedouin dialects, which remained relatively conservative until

they were also eventually influenced (Blau, 1965, p. 8). Blau's consideration of Middle Arabic as a transitional stage from Old Arabic to Neo-Arabic dialects has been criticised for not being based on comparative historical evidence (al-Jallad, 2012, p. 64; Owens, 2009, pp. 46–47). Characteristics of the alleged Middle-Arabic variety have been alternatively associated with an interference of earlier Arabic dialects with an imposed literary form of Classical Arabic and/or with second language learning errors (Owens, 2009, pp. 46–47). In a later publication, Blau (2002) relaxed the boundaries between Classical Arabic and Neo-Arabic dialects and provided a more holistic approach by stating that Middle Arabic texts involve “classical, post-classical, and often also NA [Neo-Arabic] and pseudo-correct elements” (p. 14).

According to another polygenesis theory, differences between dialects are explained in terms of substrate languages (cf. Versteegh, 2001, p. 104); whereas similarities, which do not originate from Arabic, come from subsequent borrowings. Lucas (2009), for instance, argues that bipartite negation, which involves the use of preverbal *mā* and the post-verbal enclitic negator *-š*, which is said to be derived from Classical Arabic *šay* ‘(any)thing’, in both Cairene Arabic, e.g. *ma-bəħibb-iš* ‘I don’t like’, and Yemenite Arabic, e.g. *mā yi‘jib-hum-š* ‘they don’t like’, is the result of language contact with Coptic and Modern South Arabian languages respectively. On the other hand, the existence of bipartite negation in the Maghrebi dialects, e.g. *ma nkəb-š* ‘we don’t lie’, is explained in terms of diffusion from other Arabic dialects (Lucas, 2009, p. 23). Such forms of negation represent stage II of Jespersen’s

Cycle, which involves the sequenced development of preverbal to bipartite to post-verbal negation. This development is common in some European languages, such as French (Lucas, 2009, pp. 15–19). Stage I is considered to be characteristic of Old Arabic, e.g. *mā ḏalamū-nā* ‘they did not wrong us’ (Quran, chapter 2, verse 57) (Lucas, 2009, p. 21). The sole use of the post-verbal enclitic *-š*, attested in Palestinian Arabic, e.g. *bašrab-š il-’ahwa* ‘I don’t drink coffee’, forms stage III of Jespersen’s Cycle in Arabic (Lucas, 2009, pp. 22–26).

Wilmsen (2014) argues against the hypothesis that some modern Arabic dialects are passing, or have passed, through Jespersen’s Cycle. Instead, proponents of such a view can be argued to have an underlying belief that contemporary Arabic varieties are descendants from a relatively uniform superstrate Old Arabic (Wilmsen, 2014, p. 42). According to Wilmsen (2014, p. 40), there is no substantive evidence for a grammaticalisation progression from the word *šay*’ to the negative *-š*, proposing instead a reanalysis of an existential particle, a determiner, and a post-positive interrogative reflexes of *šī* ancestors, which are recoverable in some modern dialects, e.g. *šīšī* ‘there is not’ (Omani) (Wilmsen, 2014, p. 124), *fī šī fundu*’ ‘at some hotel’ (Lebanese) (Wilmsen, 2014, p. 53), and *t-kun-š nāyim* ‘I hope you are not asleep?’ (Syrian Ḥōrān) (Wilmsen, 2014, p. 93), but missing in Classical Arabic. The source of this linguistic construction seems to be dialects found in the southern parts of the Arabian Peninsula (Wilmsen, 2014, pp. 120–147). This feature is said to be a shared innovation with some Modern South Arabian languages, considered part of west Semitic languages, that have the existential

particle *h̄* ‘there is’ (Wilmsen, 2014, p. 124), given that the lateral sibilant /ʃ/ is a proto-Semitic feature absent in Arabic (Wilmsen, 2014, p. 126). This led Wilmsen (2014, p. 27) to state that many synchronic Arabic dialects belong to groups of related varieties that descend from proto-Arabic ancestors. These modern Arabic vernaculars maintain archaic linguistic features not found in Old Arabic, but which are parallel to those attested in Semitic and Afro-Asiatic languages.

In response to Wilmsen’s objections, Lucas (2015, p. 10) cites a number of reflexes of *-š* negation which are unquestionably derived from *šay*’ such as *-šey* and *-šī* both attested in *Ša‘īdī* Arabic (cf. Khalafallah, 1969, pp. 100–102). Lucas (2015, p. 9) agrees with Wilmsen that contemporary Arabic dialects cannot be seen as descendants from Quran or poetry, which apparently was Lucas’s initial position, but he also states that pre-Islamic varieties must have been much closer to Old Arabic than synchronic dialects.

The work of Wilmsen (2014) is preceded by that of Owens (2009), who provides a fundamental paradigm shift in approaching the classification of Old and New Arabic varieties. Owens contends that the division of Old and Neo-Arabic varieties was accepted as fiat, rather than being based on sound methods of historical comparative linguistics. Owens (2009) argues that “Neo-Arabic is not new because it is characterized by certain innovations relative to Old Arabic, but simply because the dialects are chronologically younger than Old Arabic” (p. 43). In his view, the differences between Neo- and old dialects are partial and indicative of chronological variations and as

such they should not be viewed as discrete historical stages of linguistic development. Hence, Arabic should be viewed

not as a simple linear dichotomous development, the Old vs. New split, but rather as a multiply-branching bush, whose stem represents the language 1,300 years ago. Parts of the bush maintain a structure barely distinguishable from its source – in linguistic terms parts in which an Old-New dichotomisation is wholly irrelevant. Other parts of the bush are marked by striking differences, differences which distinguish them as much from other parts of the appendages as from the stem (Owens, 2009, pp. 77–78).

Owens (2009) offers a historical comparative study of contemporary Arabic dialects and their ancestral linguistic forms to support his hypothesis against the Old/new Arabic dialect dichotomy. He correlates Neo-Arabic dialects with what he calls pre-diasporic Arabic which existed “at a time and place when the ancestral populations were still together” (Owens, 2009, pp. 2–3). The approximate time frame for pre-diasporic Arabic is dated from 630 CE, i.e. when Arabic-Islamic expansions initiated, till the time of Sībawayh’s work in 790 CE (2009, pp. 2–3). Although Sībawayh’s era extends well beyond the early Islamic conquests, Owens (2009, pp. 87–88) considers al-Kitāb the earliest and best available source for Old Arabic’s “comprehensive grammar where a large body of eyewitness observations of actual linguistic usage are systematically recorded”. Because of this, he (2009, p. 3) argues that Sībawayh’s work can be treated as a point of departure against which reconstructions of modern Arabic dialects should be compared, taking into account due recognition of some of Sībawayh’s limitations. Examples of these

include the fact that Sībawayh was a Persian speaker who primarily had access to speakers residing in the vicinity of Basra. Therefore, Owens (2009, p. 3) claims that while Sībawayh describes tribal and areal linguistic forms found in the Arabian Peninsula, he was not an actual fieldworker in the literal sense of the word as he did not personally travel to the homeland of Arabia to collect data. Owens (2009, p. 93) adds that al-ʿArabiyyah as described by Sībawayh does not necessarily encompass all the linguistic facts available at his time, instead using his own grammatical thinking to filter the available raw linguistic data and integrate them into a more or less coherent systematic whole (Owens, 2009, p. 93). This shows a realisation that pre-diasporic Arabic was by no means a single homogenous variety but a collection of numerous pre-diasporic varieties (Owens, 2009, pp. 2–3). Owens (2009, p. 80) argues that the most notable reported difference between Old Arabic and synchronic Arabic varieties is related to *ʾiʿrāb* or case system. He (2009, pp. 85–118) adds that issues exist regarding the presence of caseless forms in Old Arabic, as well as the occurrence of vestiges of a case system in the so-called Neo-Arabic dialects, which leads him to question the claimed case-based Old Arabic source of caseless forms in Neo-Arabic varieties. Concerning this, Corriente (1976, p. 88) argues, on the basis of epigraphic evidence, that pre-Islamic caseless forms spread from Nabataean Arabic, found in Syria and Iraq, into other Arabic varieties. However, as has been argued previously in section 3.2, Nabataean may not actually be an Arabic variety in the first place. Even if we assume that Nabataean was a form of Arabic, there is some doubt as to whether one ancient variety could explain caseless forms in all modern Arabic dialects (Owens, 2009, p. 87). Another explanation of caseless

forms in Neo-Arabic dialects is suggested by Blau (1965, p. 3) who assumes that Neo-Arabic ceaseless forms originate from Old Arabic pausal forms. This is refuted by Owens (pp. 98-99), who implements Sībawayh's description of pausal forms to show the difficulty involved in finding modern dialectal forms that are parallel to those of Old Arabic. Owens (2009, pp. 99–100) adds that the number of non-pausal positions in spoken language generally exceeds that of pausal positions, which makes it problematic to presume that what applies to relatively infrequent forms would be analogically extended to frequent ones. Owens (2009, pp. 79–118) provides an alternative hypothesis, arguing that case endings did not exist in the first place in the predecessor of modern dialects and that a caseless variety existed alongside or even before a case-based one. This would mean that, as with caseless modern Arabic varieties, the synchronic vast geographical distributions of Arabic dialects which indeed exhibit some remnant of case endings or *tanwīn*, e.g. Najdī *bēt-in* 'a (particular) house' (Ingham, 1994, p. 47), Spanish Arabic *šayy-an yubtā* 'a thing which can be bought' (Corriente, 1977, p. 122), imply a common pre-diasporic ancestor (Owens, 2009, p. 102). Nonetheless, the apocope of case endings may alternatively be considered a historical sound change where case endings are elided to avoid redundancy, especially as they do not carry significant morphological meaning. In the example of the presence of case endings in Spanish Arabic, case ending examples need to be carefully dated as they may belong to an early form of Arabic, especially given that Arabs arrived in Spain from as early as the 8th century CE (cf. Corriente, 1977, p. 6). As to the retention of case ending vestiges in Najdī Arabic then this is explainable in terms of its conservative nature.

The lack of sufficient evidence on the state of spoken non-literary Arabic post-Islamic conquests makes it hard to arrive at an uncontroversial explanation. Since the hypotheses of a common koiné, and a pidginisation/creolisation process have been met with substantial scepticism, we are left with a reconciliation of the more convincing explanations of substratal influences, convergences, spreads of trends, foreign language acquisition hypotheses, and maintenance of proto-forms. Such explanations need to be considered in relation to specific linguistic features and not to the language as whole, as different features may be subject to diverse circumstances.

Prior to discussing the schematisation of Neo-Arabic dialects, it should first be noted that they exist in a state of diglossia with Modern Standard Arabic, which is the contemporary literary form of Old Arabic used in writing and in very formal speech settings, e.g. religious sermons, TV news broadcasts, education, and historical TV series. The rebirth of Modern Standard Arabic came as a result of Egypt's exposure to western cultures, primarily French and English, initiated by Napoleon Bonaparte's short expedition in 1798 CE. This was further supported by the subsequent ruling of the Ottoman Albanian commander Muḥammad 'Alī (1805-1948 CE), who sought to reform and modernise Egypt in accordance with European standards. During 'Alī's reign, Arabic had to be modernised, especially in terms of lexical items, in order to cope with the advancements taking place in different fields as diverse as technology, administration, diplomacy, and manufacture (Holes, 2004, p. 42; Versteegh, 2001, pp. 173–183). With the

downfall of the Ottoman Empire in the 19th century CE, literary Arabic came to occupy an even more essential role as it began to signify pan-Arabism and the unity of Muslims (Holes, 2004, p. 43). As a result of the spread of literacy especially during the mid-19th century, elements of Modern Standard Arabic started to penetrate into Arabic dialects (Holes, 2004, p. 46). Although Modern Standard Arabic is more or less syntactically uniform across the Arab world, there are partial regional variations in terms of lexical items between the *Maghrib* ‘western’ countries, i.e. Libya, Tunisia, Morocco, and Algeria, and the *Mashriq* ‘eastern’ countries, i.e. the rest of the Arab world. For instance, the term *nazl* ‘hotel’ is used in *Maghrib* countries; whereas the term *funduq* is used in *Mashriq* countries (Holes, 2004, p. 47). In formal speech, the main variations corresponding to regional dialects are morphophonological (Holes, 2004, p. 48) and phonological in nature. Nevertheless, different typologies of Neo-Arabic varieties are provided due to “the impossibility of making clear-cut divisions between dialect areas, especially in regions with an uninterrupted geographical spread of population” (Ingham, 1982, p. 26). Linguistic features considered as isoglosses of certain dialects may not be exclusive to them, as they may be found in remote areas as a result of previous diverse patterns of migrations.

Prior to a discussion of different schematisations of Arabic dialects, it should be noted that Maltese, which is an offshoot of a western vernacular Arabic or Maghrebi Arabic heavily influenced by Sicilian and Standard Italian (Comrie, 1991, p. 234), is considered a separate language from Arabic, especially given that it has developed its own Roman based script (Rubin,

exhibit features like the use of [ʔ] as a realisation of /q/, stops instead of interdentals, and gender neutralisation of the 2nd and 3rd person plural of pronouns and verbs (Versteegh, 2001, p. 153). Egyptian dialects generally maintain the three short vowels of Classical Arabic, however they commonly elide the vowels /i/ and /u/ when they occur in open and unstressed syllables (Versteegh, 2001, p. 162). Common features of the Magherbi dialects, which distinguish from other dialects, are the use of the prefix *-n* as the 1st person singular of imperfect verbs, and the use of only two short vowels /ə/ (classical Arabic /a/ and /i/) and /u/ (Versteegh, 2001, p. 166). Dialects of the Arabian Peninsula are characterised by the use of [g] as a realisation of /q/, the use of Classical Arabic interdentals, and the presence of a social gender distinction in the use of the 2nd and 3rd person plural of verbs and pronouns (Versteegh, 2001, p. 148).

Ingham (1982, p. 1) identifies three groups of Arabic dialects, chiefly based on declared geographical criteria, though linguistic aspects may tacitly be involved. These are the South Arabian dialects, spoken in Yemen, Ḥaḍramawt, Oman, and by Shiites of eastern Arabia; the West Arabian, spoken in al-Ḥijāz, Syria, Jordan, Palestine, Lebanon and Egypt; and the North East Arabian, which is Ingham's (1982, p. 1) typological focus. This last group can be considered to be territorially related but genetically subdivided into two groups: the Arabian and the Mesopotamian. The Arabian dialect is spoken in the Gulf, more particularly in Kuwait, al-ʿAḥsāʾ, the northern parts of Saudi Arabia, and by western Iraqi Bedouins. The Mesopotamian dialects, on the other hand, include southern Iraq and

Khuzestan in southern Persia. On the basis of the work of 19th Century German dialectologists, Ingham (1982, p. 26) realises the impossibility of drawing clear-cut boundaries between dialects, advocating instead that they be placed along a continuum of linguistic and geographical features. As such, he (1982, pp. 77–101) considers three layers of linguistic stratification within North East Arabian dialects. First, Ingham (1982, p. 79) compares Mesopotamian dialects against other dialects of the Arabian Peninsula based on a number of linguistic aspects such as the use of some feminine plural pronominal suffixes, realised as *-an* in Mesopotamian dialects, e.g. *arwāḥĉan* ‘yourselves f.pl.’, and as *-in* in the Arabian type of dialects, e.g. *yšūfin* ‘they f.pl. see’ (ḡafir) (Ingham, 1982, p. 81). Second, there are some features that associate Mesopotamia with northern Najdī dialects against central Najdī and other Gulf dialects, such as the use of the second masculine singular object suffix *-ak* in northern dialects in contrast to *-ik* in southern dialects (Ingham, 1982, pp. 87–88). Third, Najd and Bedouin dialects are separated from Mesopotamia and the Gulf in terms of a number of characteristics such as the realisation of Classical Arabic /k/ as [ć] in the interior of the Peninsula, which is realised as [č] in the outer fringes of the Arabian Peninsula (Ingham, 1982, p. 95).

As mentioned previously, the dialects of the Arabian Peninsula have been historically classified into either western Ḥijāzī or eastern Tamīmī. Prochazka (1988, p. 3) provides a recent classification that broadly matches the traditional one. He (1988, p. 3) restricts his classification to Saudi dialects, which he divides into the dialects of southern al-Ḥijāz and Tihāmah, and the

Central and Eastern Arabian dialects based on, at least in part, how they realise the Classical Arabic pattern C₁aC₂aC₃ (*fāʿal(a)*). In the southern al-Ḥijāz and Tihāmah dialects, the pattern C₁aC₂aC₃ is used, e.g. *katab* ‘he wrote’ (Abhā); whereas the central and eastern Arabian dialects utilise the C₁iC₂aC₃ pattern, e.g. *kitab* (Hufūf) (Prochazka, 1988, pp. 27–28).

Johnstone (1967, pp. 1–2) divides dialects in the Arabian Peninsula into four groups: North Arabian, Ḥijāzī, South-western Arabian, and Omani. Johnstone did not provide much detail on the linguistic features he used to classify these dialects as separate. The focus of Johnstone’s (1967, p. 2) work was on North Arabian dialects, which he claims to share common features, such as the affrication of /k/ and /g/. The North Arabian dialects can be further subdivided into the Syro-Mesopotamian, the Šammari, the ‘Anazī, and the East Arabian dialects (Johnstone, 1967, pp. 1–2). The East Arabian dialects include Kuwait, Baḥrain, Qaṭar, al-ʿAḥsāʾ, and Trucial Oman or the UAE. Syro-Mesopotamian and East Arabian as well as some northern Šammari dialects realise /k/ and /g/ as [č] and [j] respectively, e.g. *halčān* ‘thirsty’ (Southern Iraq), *jaddūm* ‘adze’ (Bahrain)⁸ (Johnstone, 1963, pp. 2–4). The ‘Anazī dialects as well as central Shammarī ones use [ć] and [dz] as reflexes of /k/ and /g/ respectively, e.g. *aćil* ‘food’ (Sba‘a), and *sīdzān* ‘legs’ (Šammari) (Johnstone, 1967, pp. 2–4). As can be seen, the reflexes of /k/ and /g/ do not fall into distinct groups that would parallel the North Arabian dialects sub-groups he provided. It must also be mentioned that Johnstone

⁸ Note that Johnstone did not provide comparable non-affricated forms for other dialects in the Arabian Peninsula.

(1967, pp. 4–6) acknowledged some other dialects which manifest affrication of /k/ and /g/. For instance, the [j] reflex is used in some Yemeni words, and in some Palestinian dialects. Additionally, some Palestinian dialects use the [č] reflex.

What Johnstone's describes as East Arabian dialects roughly coincides with what Holes (1990, p. xi) classes as Gulf dialects, stretching to include southern Iraq. In addition to the affrication of /k/ and /g/, Holes describes Gulf dialects as having in common the use of the interdental fricatives [θ], [ð], and [ð̤] as reflexes of Classical Arabic /θ/, /ð/, and /ð̤/ & /ð̤/ respectively, which are replaced by stops in many sedentary dialects (Holes, 2001, p. xvii), e.g. *θalāθa* 'three', *hāðā* 'this', *ðuhr* 'noon' (Bahraini Sunnis) (Holes, 1987, p. 42). Examples of the use of stops are *matal* (Classical Arabic *maθal*) 'example', *dihin* (Classical Arabic *ðihn*) 'mind', and *ðill* (Classical Arabic *ðill*) 'shadow' (Amman) (Holes, 2004, pp. 71–72). However, it must be emphasised that interdental fricatives are also maintained in some other Arabic varieties, such as Yemeni, Tunisian, Palestinian, and Syrian Arabic (cf. Watson, 2007, pp. 14–15). Holes (2001, pp. xv–xvi) argues that Oman should be placed in a subgroup within Gulf dialects for exhibiting some distinct linguistic features. One of the most salient linguistic features peculiar to all Omani dialects is the insertion of the infix *-n(n)-* between the active participle and object pronoun suffixes, e.g. *kānat mityawza u mṭalginha r-rayil* 'she was married but her husband divorced her' (Holes, 2013, p. 89). This feature is also found in South Yemen, some dialects of the UAE, and in the

speech of Bahārnah who live in Bahrain and eastern Saudi Arabia (Holes, 2013, p. 89).

Aside from certain common phonological and morphophonemic features that they have in common, Holes (2001, p. xv) adds that Gulf dialects share a common ‘core’ of vocabulary items that are heavily based on their Najdī heritage, but which have also evolved to cope with and express their new sedentary and littoral living conditions. The core vocabularies display possible vestiges of substrate languages, such as Akkadian and Aramaic, e.g. *zabīl/zanbīl* ‘basket’ < Akkadian *zabbīlu* ‘basket’, and *sannūr* ‘cat’ < Aramaic *šunārā* < *šurānu* (Holes, 2001, p. xxix). They are also characterised by extensive borrowings from other languages, including Persian, e.g. *trinj* ‘citron’ < *turunj* ‘orange’, Hindi/Urdu, e.g. *čabb!* ‘shut up’ < *čup!* ‘silence!’, Turkish, *būri* ‘gramophone horn’ < *boru* ‘horn’, and English, *bēb* ‘pipe’ (Holes, 2001, pp. xxx–xxxvi).

In relation to the dialect of al-ʿAḥsāʾ specifically, it can be said that historically, i.e. in terms of pre-Islamic and early Islamic history, it belongs to both western Ḥijāzī and eastern Tamimī dialects. Given that Shiites of al-ʿAḥsāʾ migrated in ancient times from Tihāmah (see section 2.3), they are historically considered as being speakers of the western Ḥijāzī dialect. In the case of Sunnis, the majority of their ancestors were migrants from Najd (see section 2.3), and as such should historically be regarded as speakers of the eastern Tamimī dialects. Concerning its synchronic classification, it will be held that al-ʿAḥsāʾ belongs to the North Arabian dialects (Johnstone, 1967,

pp. 1–2), more particularly to Gulf dialects (Holes, 1990, p. xi), based on common linguistic peculiarities, such as, *inter alia*, the affrication of /k/ and /g/, and the use of the interdental fricative [θ], [ð], and [ð̤].

Regarding the linguistic aspects of al-ʿAḥsāʿ Arabic, most of its synchronic stereotypical linguistic characteristics are associated with the Shiite variety, since this was the original spoken form of eastern Arabia prior to the arrival of Sunnis from Najd during the 18th century CE (Ingham, 1994, p. 8). Some linguistic features are almost exclusively used by Shiites in al-ʿAḥsāʿ, such as the unconditioned use of the *-ya* reflex of the 1st person singular possessive pronoun *-i*, e.g. *jaddat-ya* ~ *jaddit-i* ‘my grandmother’. This feature may also be found, with varying degrees of contexts and constraints, in other Arabic varieties such as Qatari, Cairene, Maghrebi, Damascene, Rwayli, and Najrān (see section 9.2.1). Another linguistic feature, which is more idiosyncratic to al-ʿAḥsāʿ Arabic, is the *-anya/-nya* reflex of the 1st person singular object pronoun *-ni*, e.g. *gāṭa^c-anya* ~ *gāṭa^c-ni* ‘he stopped talking to me’ (see Chapter 9). There appears to be little or no evidence of this feature occurring in other Arabic dialects. It may well be present in related dialects spoken in Qatar, the UAE, and Qaṭīf, but this lies beyond the scope of this study and should instead be the focus of future investigation. Other characterizing linguistic aspects of al-ʿAḥsāʿ Arabic are found in both the Sunni and Shiite groups, but in varying degrees, such as the backing of the long open front vowel /ā/ to [ɑ:] in non-emphatic consonantal environments, e.g. *banāt* ‘girls’ as *bana:t*, which is also found in Bahrain (cf. Holes, 1987, p. 34). Given that /ɑ:/ is also part of the Persian vowel system, it

seems likely that the presence of [ɑ:] in al-ʿAḥsāʿ and Bahrain is a result of proximity to Iran. Another feature is the elision of /h/ and its accompanying gemination of /t/ in the 3rd person feminine pronoun suffixed to perfect verbs, e.g. *ʿaṭa-tha* > *ʿaṭa-tta* ‘she gave her’. Other features are the stopping of /ɣ/ and palatalization of /k/, in both words stems and the 2nd person singular feminine object possessive, and /g/. Sunnis and Shiites also share a common core of lexical items, e.g. *ʿamhi* ‘come 2p.f.s.’, *jiṣṣa* ‘metal box for dates’, and *ṭibīna* ‘burning smell of palm leaves’.

The main existing source of information on al-ʿAḥsāʿ Arabic is Prochazka’s (1988) book *Saudi Arabian dialects*, which provides a description of the phonological similarities and differences in between Saudi Arabian dialects as spoken in many cities, including al-Hufūf. This text outlines the ways in which each of these dialects realises the inflexions of verbs and suffixations of verbs, nouns, prepositions and particles. As regards the variables investigated in this study, a number of the descriptions offered by Prochazka are in line with present study findings. For instance, Prochazka (1988, p. 15) mentions that /ɣ/ may be realised as either a voiced uvular [ɣ] or a voiceless uvular [q]. Prochazka (1988, pp. 194–208) also cites two types of realisations for the 1st person singular possessive pronoun *-i*, namely *-i/y* and *-yeh*. Similarly, Prochazka (1988, pp. 134–150) mentions two types of reflexes for the 1st person singular object suffix *-ni*, which are *-ni* and *-(a)nyeh/-yeh* (for details on the linguistic constraints of each of these realisations see section 9.2.2). This source also provides two types of reflexes for the 2nd person singular feminine object/possessive suffix *-k*, namely *-š* and

-č (Prochazka, 1988, p. 205). The findings of this study indicate that all of the aforementioned linguistic realisations are variants that are engaged in a form of stable linguistic variation within al-ʿAḥsāʿ Arabic (see sections 7.4, 8.4, and 9.4). With *-k* and other sound units, Prochazka gives only the local realisations, without mentioning the incoming supra-local forms detected in this study. As an example of this, he gives only the palatalised form *-ik* without mentioning the *-(i)k(i)* version found in the present study. He (1988, p. 16) also states that /k/ and /g/ are affricated to [č] and [j] respectively. He failed to mention [š], which is another rare local realisation of /k/. In addition, he did not mention the supra-local forms of /k/ and /g/, which are [k] and [g] respectively. Since the depalatalised realisation of /k/, both in word stems and the suffix, and /g/ and are now pervasively found in al-ʿAḥsāʿ Arabic as indicated by present study findings (see sections 6.4 and 7.4), it seems possible that they have recently emerged into the dialect. The age findings of the present study also show that the variables involved are likely to be engaged in a change in progress.

Given that Shiites and Sunnis have more in common than they have with speakers from other cities in Saudi Arabia or the Gulf, and considering that they live in the same area of al-ʿAḥsāʿ, where they interact with each other in numerous contexts, from markets to educational institutions, they can be considered a single speech community. This speech community typically includes a range of nested speech communities, such as Sunnis, Shiites, males, females, and various age groups, which are considered methodologically within the present study. There are some claims of further sub-divisions

within al-ʿAḥsāʾ Arabic between the dwellers of towns and villages (cf. aš-Šubāt, 1989, p. 182), al-Hufūf and al-Mubarrāz towns (cf. al-Ḥulaybī, 2003, p. 20; aš-Šubāt, 1989, p. 182), northern and southern villages (aš-Šubāt, 1989, p. 182), and even between neighbourhoods (cf. al-Ḥulaybī, 2003, pp. 20–21). Nonetheless, claims of subdivisions within al-ʿAḥsāʾ Arabic seem to be impressionistic, especially since no specific details are provided regarding the types of regionally-based linguistic differences that may potentially exist between al-ʿAḥsāʾ speakers.

3.4 Conclusion

Several issues have been discussed in this chapter with regards to the typology of al-ʿAḥsāʾ Arabic within the Arabic language, Semitic, and Afro-Asiatic. Arabic as a language belongs to the central subgroup of the Semitic language family, which is part of the Afro-Asiatic phylum. The earliest attested most extensive literature of Arabic is called Old Arabic, which is heavily drawn from pre-Islamic poetry and the Quran. Given that Old Arabic is based on poetic style, it may not necessarily reflect pre-Islamic dialects in every linguistic aspect. In addition, Old Arabic in itself is heterogeneous. No universal agreement has been reached on the relationship between Old Arabic and Neo-Arabic dialects. Some researchers consider Neo-Arabic dialects to have undergone processes of linguistic change from a common ancestor; others perceive these dialects as retentions from diverse proto-forms that have not been considered in Classical Arabic. Synchronically speaking, there is a state of diglossia between Neo-Arabic dialects and Modern Standard Arabic. The dialect of al-ʿAḥsāʾ belongs to North Arabian or Gulf dialects and is

uniquely characterised by an unconditioned use of the *-ya* reflex of the 1st person singular possessive/object pronouns. Unfortunately, there is little or no literature available on any further subdivisions within al-²Aḥsā³ Arabic.

Chapter 4 Research theory and methodology

4.1 Introduction

Labov's early work on New York City department stores (1966b), the island of Martha's Vineyard, and the black neighbourhoods of the inner city of New York (1973) set the foundation for the discipline of variationist sociolinguistics. These studies and others focused on quantitative examination of salient linguistic variables, which may be any linguistic unit - such as a phoneme or a syntactic structure - that has two or more realisations (e.g. the presence or deletion of postvocalic (r) or the presence or absence of (-s) marking present tense). Each of these variables were examined quantitatively vis-à-vis potential social, geographical, and linguistic determinants, each of which consisted of multiple levels, e.g. gender (male vs. female), style (casual vs. formal), class (upper, middle, or working).

Since the present study tackles a specific case of socially determined linguistic variation as found in the dialect of al-ʿAḥsāʾ, it is helpful to understand the history and context of work on sociolinguistic variation (section 4.3.3). For this reason, a discussion will be provided of selected hypotheses of linguistic variation and change that might be of relevance to the findings of the present study (section 4.3.4). Prior to examining these topics, and in order to facilitate better understanding of how sociolinguistics contributes to and fits within the broader field of linguistics, the historical antecedents that led to the development of this field will be briefly outlined (section 4.2). This will be followed by an explanation of key concepts in

sociolinguistic variation (section 4.3.1) and a discussion of some limitations often associated with this field (section 4.3.2).

4.2 Historical antecedents of sociolinguistics

Historically, the general field of linguistics has undergone several phases, from the prescriptive grammatical discipline and through historical linguistics, comparative philology, and the Neogrammarian school (cf. De Saussure, 1986, p. xxi) to later phases, which include the structural and generative approaches. Within the structural paradigm, De Saussure (1986 [first published 1916]) holds that the subject of linguistic inquiry should be *langue*, i.e. the abstract systems of rules, as opposed to *parole*, i.e. specific instances of language use. Similarly, Chomsky (1965) asserts that linguistic description should be based on competence or the grammatical knowledge of language, rather than on performance (language use). Therefore, the goal of structural and generative research theories is to investigate the abstract systemic principles underlying the language of homogeneous idealised speech communities (Chomsky, 1965). They are clear representatives of the categorical axiom where variations and irregularities are excluded for the sake of reaching general descriptions (cf. Chomsky, 1965).

Chomsky's early framework of generative grammar has been criticised by Labov (1972a, pp. 186–187), who considered some of Chomsky's premises problematic, especially those stating that a fully developed linguistic theory may be based on a homogeneous fraction of language and that abstract systems of rules may be grounded on speakers' intuitions about competence.

Labov (1972a, pp. 188–189) argues instead that variation is part of the language system and that actual speech is full of ungrammatical forms. In other words, he opines that languages are inherently variable. Labov found substantial empirical evidence of systematic relations between variation and non-linguistic factors, which led him to search for answers to questions related to the main behaviouristic dialect contact mechanisms underlying linguistic change or preservation, rather than simply proposing general theories based on idealised considerations. Using this premise, Labov established the basis for sociolinguistics as a scientific discipline. It should not be presumed that sociolinguistics existed in a vacuum, as several interdisciplinary fields attempting to join language, culture, and society paved its way, as will be seen below.

4.2.1 Sociocultural linguistics

Although the concept of associating linguistic variation with social factors was theoretically and methodically established within the field of sociolinguistics during the 60s and 70s, calls to consider language a social and cultural phenomenon were made earlier. This section begins with a brief description of socially and culturally oriented approaches to the study of language during the 18th and 19th centuries. Following this a description will be provided of the evolution of different interdisciplinary fields connecting language with society and culture during the 20th century.

One of the early attempts to consider social aspects in linguistic investigation was made by the German philosopher Wilhelm von Humboldt

(1767-1835), who rejected the notion that language is merely a group of communicative signs (cf. Deumert, 2013, p. 656), and proposed instead that language is a human cognitive ability used to express cultural and linguistic diversity (Humboldt, 1999, p. xi). From this perspective, von Humboldt viewed language not merely as a product (Ergon) but as an activity (Energie) that is both dynamic and interactional (cf. Deumert, 2013, pp. 657–658). William Dwight Whitney (1827-94) supported these assertions by proposing that speech is a social possession that pertains not to the individual per se, but to society's members at large, who implement language to fulfill their social needs (Whitney, 1867, p. 404). In addition, Hugo Ernst Maria Schuchardt (1842-1927) considered social factors essential determinants of linguistic use, with lower social classes acting as integral forces of change. Schuchardt paid special attention to language contact and the way mixed languages, currently known as creoles and pidgins, affect linguistic change (cf. Deumert, 2013, pp. 661–662). A more empirically based approach to associating linguistic variation with extra-linguistic factors arose during the late 19th century, in the form of dialect geography. This field relied heavily on sending questionnaires and asking fieldworkers to transcribe data to fulfil the aim of “describ[ing] the geographical distribution of linguistic features” (Trudgill, 1974a, p. 216). Dialect geography is often considered an antecedent of contemporary sociolinguistic approaches because of the great emphasis it placed on describing linguistic variation and associating it with external factors that pertain not only to space, e.g. location, and settlement type and history, but also sometimes to society, e.g. education and class. The study of regional dialect variation was initiated by Georg Wenker, between 1877 and 1887.

Wenker sent a questionnaire to fifty thousand school masters in Germany, who were required to transcribe a number of standardised German sentences into their local dialect. He received replies from forty five thousand schools, enabling him to agglomerate an enormous amount of data. Volumes of the *Deutscher Sprachatlas* 'Atlas of the German Language' were edited and published by his successor Ferdinand Wrede in 1926 and beyond. Likewise, the *Atlas linguistique de la France* 'Linguistic Atlas of France' was published by Jules Gilleron and his fellow-worker Edmond Edmont between 1902 and 1919. Similar projects were carried out in North America, such as the *Linguistic Atlas of the United States and Canada*, which was run by Hans Kurath in 1931. Unlike traditional dialectologists, Kurath gave some attention to the role of social factors in dialectal variation, requiring fieldworkers to obtain data from different social groups in the New England section of the Atlas (cf. Chambers & Trudgill, 1998, p. 45). Some dialectologists even attempted to describe linguistic variation in terms of social factors, such as Wegner (1880) who noticed differences between educated city elites and uneducated rural inhabitants (cf. Deumert, 2013, p. 659; Murray, 2010, p. 79).

The fields of linguistics, anthropology, and sociology came to be firmly established during the late 19th and early 20th centuries. Although boundaries between these disciplines have never been strict, it was not until the 60s and 70s that the conceptual and methodological bases were created for a number of cross-disciplinary fields, which connect the investigation of language to the study of culture and society. There seems to be a lack of agreement regarding the designation and classification of these

interdisciplinary fields. This may be attributable to the gradual emergence of new schools of thought, each with its own theoretical goals and methodological orientations. Although Bucholtz & Hall (2008, p. 4) have used ‘sociocultural linguistics’ as a broad cover term for all of the interdisciplinary strands of research that involve the triad of language, society and culture, it is worthwhile to understand the difference between them.

The term ‘sociolinguistics’ was first used by Hymes (1977, pp. vii–3) to refer to a wide range of topics that correlate linguistics with sociology and anthropology. As a result of this, during the 1960s and 70s, sociolinguistics was occasionally considered as being synonymous with both the sociology of language (Fishman, 1968, p. 6), and anthropological linguistics or linguistic anthropology (Duranti, 2009, p. 2). Each of these terms later began to be recognised as a distinct level of analysis. During the 80s, sociolinguistics, also known as ‘micro-sociolinguistics’, began to be identified as “the study of language in relation to society” (Hudson, 1996, p. 4). This was strongly associated with Labov’s quantitative approach, which seeks to examine the influence of social, geographical, and linguistic factors on linguistic variation and change (for more details see section 4.3). On the other hand, the sociology of language, also known as ‘macro-sociolinguistics’, is used to refer to “the study of society in relation to language” (Hudson, 1996, p. 4). The emphasis of this field is on the investigation of social structure and how it is affected by language. Its founder, Fishman, considered between-group variance more significant than within-group variance (Fishman, 1987, p. 2). As such, he worked on broader intra-group “factors, dimensions and

parameters that are demonstrable over and above the varying tendencies, dispositions and idiosyncrasies of unique individuals” (Fishman, 1987, p. 2). Within bilingual and multilingual settings, he focused on issues such as ethnicity, nationalism, identity, religion, and power. He further investigated language planning, language policy, language shift and maintenance, reversing language shift, and language spread (García, Schiffman, & Zakhariah, 2006). Another important contribution to the field was made by Ferguson (1959a, p. 232), who proposed diglossia, another dimension of analysis, which takes place “where two varieties of a language exist side by side throughout the community, with each having a definite role to play” (as discussed in section 3.3). Ferguson was further interested in standardisation as a form of spread (Ferguson, 1997). The methodology of the sociology of language relies primarily on qualitative ethnographic observations, which are used as a basis for subsequent empirical and quantitative data collection techniques such as interviews, questionnaires, and censuses (García et al., 2006, pp. 15–16).

As for anthropological linguistics and linguistic anthropology, these terms are sometimes used interchangeably (cf. Duranti, 2009, p. 3), and at other times considered as two intellectual enterprises, whereby anthropological linguistics is seen as a “subfield of linguistics which is concerned with the place of language in its wider social and cultural context, its role in forging and sustaining cultural practices and social structures” (Foley, 1997, p. 3); whereas linguistic anthropology is considered as a branch of anthropology dedicated to “the study of language as a cultural resource

and speaking as a cultural practice” (Duranti, 2009, p. 1). Interdisciplinary fields that connect linguistic and anthropological perspectives have undergone a form of paradigm shift over the 20th century, with the development of new theoretical frameworks and methods that did not necessarily replace existing ones. Two paradigms may be distinguished. The first emerged as a subfield of anthropology in North America under the influence of researchers such as Boas, Sapir, and Whorf, who also considered themselves as linguists. They established a fieldwork-based approach to the documentation and description of the grammatical structures of aboriginal languages, mainly those of Native American languages, as a means of understanding their history and culture. Over the next phase, the ethnography of speaking (Hymes, 1962), later modified to the ethnography of communication (Hymes, 1977), was developed. One of Hymes’ primary assumptions is that attention should be given to the study of communicative competence. Unlike Chomsky’s linguistic competence, communicative competence is not only concerned with grammatical aspects but also with the ability to produce a socially contextualised linguistic performance that is functional within a given speech community. Hymes (1977, pp. 170–171) was critical of Chomsky’s idealizing approach, which does not account for linguistic variation, on grounds that linguistic theory should be able to account for both linguistic diversity as well as coherence across the social realm. From an anthropological standpoint, Hymes (1996, p. 4) insisted that linguistic study should be based on qualitative observation rather than quantitative measurements. Based on the ethnographic tradition, Gumperz (2003, p. 221) based his interactional approach of discourse analysis, in which specific attention is paid to situated

and contextual linguistic performance. The focus is on how speakers rely not only on ‘verbal signs’, i.e. literal or denotational meaning, but on ‘indexical signs’, i.e. extra communicative knowledge, to interpret what is ‘intended’ (Gumperz, 2003, p. 221).

4.3 Variationist sociolinguistics

Labov established the field of variationist sociolinguistics with the basic presumption that systematic variations are best found in the vernacular (see section 5.1.1.3 for more details). The vernacular is described as natural, spontaneous, everyday speech. Several data collection techniques may be implemented to gain access to this kind of language, such as anonymous surveys, sociolinguistic interviews, and long-term participant observations. Through these methods, Labov was able to find positive correlations between linguistic variation and social stratification, as well as linguistic constraints. Labov suggested that such findings should be used as synchronic tools for detecting processes of linguistic change that may be verified diachronically, i.e. by comparing descriptions of present processes with previous and/or future findings.

Prior to discussing major early studies in variationist sociolinguistics, basic concepts of sociolinguistic variation will be explained (section 4.3.1). This will be followed by a discussion of some general limitations sometimes associated with the variationist sociolinguistic field (section 3.3.2).

4.3.1 Basic concepts

Two basic concepts of sociolinguistic variation, namely the vernacular (section 4.3.1.1) and the speech community (section 4.3.1.2) will be explained in this section.

4.3.1.1 The vernacular

Labov (1972b, p. 112) defines the vernacular as one “in which the minimum attention is paid to speech” and as “the style which is most regular in its structure”. In his New York City study, which was conducted almost five decades ago, Labov (1966b) considered five contexts in which casual speech may be triggered. These are speech outside the formal interview, with a third person, not as direct answers to questions, on kids games, and as answers to the danger of death question. In these contexts, Labov identified casual speech via a number of channel cues: pitch, tempo, breathing, and laughter (cf. Labov, 1966b, 1972b, p. 113). According to Labov (1972a, pp. 94-96), such channel cues can vary considerably and therefore should not be used without reference to context. Ever since the New York City study, Labov (2001a, p. 89) has noted an overall consensus in the field regarding the reliance on contexts solely to mark the vernacular, because they are easier to use. In an attempt to avoid subjectivity, Labov (2001a, pp. 89-93) devised a decision tree model that enables different levels of casual and careful speech to be contrasted. According to this model, casual spontaneous speech is marked as that which occurs in one of four contexts: narrative, group (addressing a third person), kids (games, experiences and so on), and tangent

(a lengthy talk of interest to the speaker that does not conform to the last question posed by the interviewer). In contrast, careful speech is found in four contexts: response (the first sentence that follows the interviewer's question), soapbox (extended expression of generalized opinions addressed to a general audience), language (answers to questions about language), and careful residual speech (language that does not fall into any of the seven aforementioned categories) (Labov, 2001a, pp. 89-93).

Some of the premises underlying Labov's use of the stylistic axiom to define the vernacular have been subject to criticism. In particular, some criticism has been levelled at the way in which Labov classifies the vernacular in terms of attention paid to speech, because this is difficult to measure quantitatively (cf. Schilling-Estes, 2008, p. 974). It is also considered to be subjective (cf. Schilling-Estes, 2008, p. 974, Becker, 2013, pp. 93-94) as it compels linguists to act as arbiters of authentic speech (Bucholtz, 2003, p. 407). Another criticism pertains to the ideological circularity in that "the vernacular is whatever style has the highest rates of non-standard speech, and the highest rates of non-standard speech indicate we have "captured" the vernacular" (Becker, 2013, p. 96). In this regard, Schilling-Estes (2004, p.188) opposes the assumption that Labov makes that naturalness and spontaneity are only found where there is high usage of local vernacular features. Instead, she (2004, p.188) notes that low levels of localised features may be found in spontaneous natural speech, which can be indicated by alternative signs, such as narratives, direct address, and discourse markers of involvement. There is also the inherent limitation in terms of how shifts in

style are seen as merely responsive to changes in context, without consideration of how they can carry some acts of identity that serve communicative needs (cf. Eckert, 2003, p. 113).

Given that Labov (1972a, p. 90) himself has acknowledged the limitations of vernacular elicitation methods, stating that “[w]e have defined a direction but not a destination”, the above critique should not be considered a comprehensive dismissal of the vernacular as a valid subject of study, but as a recognition of some of its implications. In particular, the criticisms are intended to help acknowledge the abstract nature of the vernacular, how it holds a relative rather than discrete status in the continuum towards the standard, and that there is no such thing as an absolute natural speech style (cf. Milroy & Gordon, 2003, p. 50; Milroy, 1987, p. 60). They are also intended to help avoid equating low usage of localised features with the vernacular, as well as to give some consideration to how speakers play an active rather than a reactive role with regards to shifts in style.

4.3.1.2 The speech community

In variationist sociolinguistic investigations, researchers aim to examine representative samples of speech communities. Despite being integral to the study of sociolinguistic variation, the concept of speech community is still considered to be fuzzy in terms of its criteria (Wardhaugh, 2010). No consensus exists with regards to its definition. For instance, Bloomfield (1933, p. 42) defines the speech community as “a group of people who interact by means of speech”. Through this definition, Bloomfield equates

speech community with language. Although Bloomfield (1933, p. 42) recognizes the existence of economic, political, and cultural groupings, he (1933, p. 42) does not perceive them as constituting different speech communities. As such, he talks about a single English speech community, even if its speakers belong to different countries, such as Britain and the United States. At the same time, he (1933, p. 42) considers Polish and German speakers, who both live in Poland, as being two separate and distinct speech communities. Using this sense, Bloomfield (1933, p. 45) considers speakers who use a foreign language as belonging to a foreign speech community. He (1933, p. 46) acknowledges the presence of individual differences within speech communities, but attributes them to density of communication. Gumperz (1968, p. 381) adopts a view that is close to Bloomfield's position, defining the speech community as

[a]ny human aggregate characterized by regular and frequent interaction by means of a shared body of verbal signs and set off from similar aggregates by significant differences in language usage.

Gumperz (1982, p. 24) also agrees with Bloomfield's view on the presence of internal variations, although he highlights their systematic nature and the way in which they correspond with social factors. According to Gumperz, a speech community may be viewed as (1982, p. 24) "a system or organized diversity held together by common norms and aspirations". Unlike Bloomfield, Gumperz (1968, p. 381) recognises the existence of smaller speech communities that share certain linguistic features, e.g. a sub-region, an occupational association, or a neighbourhood gang. At the same time, he

(1972, p. 31) relaxes linguistic boundaries in his use of the term linguistic community to refer to “a social group which may be either monolingual or multilingual, held together by frequency of social interaction patterns and set off from the surrounding areas by weaknesses in the lines of communication.”. However, Bloomfield’s (1933) and Gumperz’s (1968) reliance on linguistic criteria for the identification of the speech community was rejected by Hymes (1974, p. 47), who argues instead that

[o]ne starts with a social group and considers the entire organization of linguistic means within it, rather than start with some one partial, named organization of linguistic means, called a ‘language’.

Therefore, Hymes (1974, p. 47) defines the speech community as a

community sharing knowledge of rules for the conduct and interpretation of speech. Such sharing comprises knowledge of at least one form of speech, and knowledge also of its patterns of use.

Unlike the previous descriptions, which are primarily based on theoretical assumptions, Labov grounds his definition of the speech community on empirical evidence. For example, the findings of his New York City study (1966) are used to describe the speech community as one “united by a common set of evaluative norms, though divergent in the application of these norms” (1966, p. 355). Similarly, his study of short (a) in Philadelphia Labov (1989, p. 2) informed his decision to consider the speech community [as] “an aggregate of speakers who share a set of norms for the interpretation of language, as reflected in their treatment of linguistic variables: patterns of social stratification, style shifting, and subjective evaluations”. Milroy &

Milroy (1998, pp. 180-181) criticise Labov's position because they perceive it to be based on a consensus model that treats the whole community as a single unit. However, their criticism seems unfounded given the considerable methodological weight that Labov grants to social stratification, which demonstrates that he recognises the diverse nature of speech communities, rather than treating them as single units. Milroy (1982, p. 46) also questions the presence of identical social evaluations shared by individuals belonging to different social backgrounds. However, using this sense could lead to infinite divisions within any speech community, as there will always be idiosyncratic individuals who carry divergent social evaluations, resulting in researchers adopting this model being unable to reach a satisfying unit of analysis. Furthermore, the Milroys seem to overlook the point that Labov talked about a set of evaluative norms, i.e. a group of typical or usual evaluations. Such evaluative norms can be distributed across social levels, and can be collectively considered as relatively homogeneous when compared against other speech communities and the ways in which they treat linguistic variables. Given that there is no such thing as an absolute single unit to begin with, having a level of homogeneity represented by a relative degree of in-group homogeneity that can be contrasted against other groups can justify their being considered as part of one group. Milroy & Milroy (1997, p. 53) attempted to further support their view by stating that vernacular speakers do not hold the same evaluative norms as standard speakers. This argument was disapproved by Patrick (2002, p. 589), who opposes the assumption that New York City vernacular speakers will fail to use Standard English under a consensus model, or that they will succeed in using a low-prestige variety

under a conflict model. According to Patrick (2002, p. 589), such a hypothesis is contradictory to sociolinguistic conventions that grant each of the standard and vernacular forms their own status.

In contrast to Milroy & Milroy's suggestion, Kerswill (1994, p. 37) advocates the incorporation of nested contexts, thereby enabling higher levels of heterogeneity to be integrated. According to Kerswill (1994, p. 37), speech communities made up of systematically related varieties, by which he means ones with coherent linguistic patterns and forms of evaluation that can be contrasted against neighbouring ones, can be combined into larger speech communities. Regarding the use of a consensus versus a conflict model of speech community, researchers vary greatly in terms of the scale they implement. For instance, as stated earlier, Bloomfield (1933, 42) considers any native speaker of English as being part of the broad English speech community. Paolillo (1999) also adopts a large scale in his discussion of the virtual speech community. Young speakers are another large assemblage considered to be a speech community (Taine-Cheikh, 2007, p. 51). The term speech community has also been used to refer to ethnic groups distributed across different geographical locations, such as the African American speech community (cf. Rickford, 1997), even though African American English is spoken in cities around the United States, e.g. New York, Chicago, Detroit, Philadelphia, Washington, DC, Los Angeles, and Baltimore (cf. Bailey 2001, p. 66). On the other hand, speech community has also been used to refer to a single city with a diverse ethnic population, such as Labov's (1966) study of New York City. The term speech community has also been used to refer to a

group of speakers with specific social criteria, such as adolescent females of Jamaican descent who were born and raised in Britain (Edwards, 1988). Smaller speech communities are used to refer to groups of people related by blood, e.g. clan (De Vries, 2012), or site, e.g. a village of 380 people (Reynolds, 2012).

Speech communities can be viewed as part of a hierarchic structure, each consisting of sub-divisions and are simultaneously part of higher levels. The process of delineating the boundaries of a speech community should ideally be based on the objectives of the research in question. Although conflict models can offer some benefit to contexts of severe racial or class oppositions, they are not universally applicable (Patrick, 2002, p. 589). In fact, conflict models are considered ‘unnecessarily restrictive’, with weak explanatory power compared to broad consensus models, which allow for stronger interpretations of stratification (Patrick, 2002, p. 590).

4.3.2 Limitations

As stated earlier, there are some limitations associated with the variationist sociolinguistic field. First, variationist sociolinguistics has been criticised by some researchers for lacking a convincing theoretical model. Coulmas (1998, p. 3), for instance, notes the theoretical deficit of sociolinguistics and the existence of ‘theories but no theory’. Romaine (1994, p. 240) agrees that sociolinguists have successfully developed powerful quantitative methods for analyzing heterogeneity, but claims that they have failed to comprehensively

explain the theoretical framework of sociolinguistics. She (1994, p. 240) also argues that there is a confusion in sociolinguistics as regards the difference between cause and effect, especially in terms of how sociolinguists are often caught up in conducting quantitative analyses of linguistic variables where presupposed social constructs such as gender and class, which have initially motivated the study, are often left out in the final product. In addition, it has been argued that sociolinguists deal with social factors as if speakers were responding to them passively, without any agentivity on their side (Romaine, 1994, p. 240).

Regarding the theoretical basis of sociolinguistics, Labov (1994, p. 4) is already aware that the prevailing approach to linguistic theory construction involves creating a model that would specify the different elements of linguistic structure, and the rules for how these elements are related, and reflected empirically. Nonetheless, as stated earlier, he (1994, p. 4) argues that it seems pointless to attempt to build a model that would truly represent all potential processes of linguistic change. He (1994, p. 4) proposes, instead, asking “general questions about the routes, mechanisms, and causes of change...” and to answer these questions by conducting studies on representative samples of speech communities undergoing linguistic change in progress. By drawing general inferences, and replicating these studies in other communities, it may be possible to reach some generalisations or principles of linguistic change (Labov, 1994, p. 4). It is hoped that eventually we would be able to reach a group of general principles that would lead to the development of what may be considered a theory (Labov, 1994, p. 4).

It is worth noting that there have been various attempts to bridge the gap between theoretical structural/generative linguistics and empirical sociolinguistics. Sankoff and Labov (1979), for instance, tried to incorporate variation within existing linguistic theories. They proposed a set of variable rules, which are adapted from generative optional rules. But these rules are based on the assumption that competence should include variation and that data should be based on reality rather than on intuition. By doing so, generative linguistics was denied one of its basic premises; which is the study of competence and not performance. There were several other attempts, e.g. polylectal grammars (Bickerton, 1972), variety grammar (Klein & Dittmar, 1979), and generative dialectology (Newton, 1972). However, these attempts were generally deemed to be unsuccessful (cf. Bickerton, 1971; Cedergren & Sankoff, 1974; R. Hudson, 1996) and have subsequently fallen out of favour. It seems difficult to integrate empirical sociolinguistic findings within structural theories because “there is a gulf between the axiom of categoricity as presently formulated and empirical reality” (Chambers, 2009, p. 33). Nevertheless, structural concepts are deeply embedded within the interdisciplinary field of sociolinguistics. Structural information is necessary to identify the context of variation. In fact, the linguistic variable itself is a structural unit, whether it is phonetic, morphophonemic, syntactic or supra-segmental. Different realisations of this variable may be seen as alternative structural units.

Concerning Romaine’s (1994, p. 240) claims that sociolinguists often overlook the role of social factors in perpetuating linguistic diversification

and how they miss out on the active roles of speakers and the way they deliberately associate themselves with certain social roles as opposed to unintentionally falling into presupposed categories, it must be said that increasing attention is given in contemporary sociolinguistics to micro-level ethnographic approaches, whereby researchers pay special attention to different aspects of social factors and the way participants actively engage in certain roles. However, these endeavors are not without limitations, especially in terms of their generalizability and external validity, as will be seen in section 4.3.3.

Another drawback associated with sociolinguistics has to do with its focus on central members and its exclusion of marginal ones, i.e. members whose identities are different from the wider community (Bucholtz, 1999, p. 208). This problem may be ameliorated by conducting specific ethnographic studies dealing with minorities or marginalised speakers (cf. Stanford & Preston, 2009). A further disadvantage relates to the way quantitative analysis deals with speakers who do not follow the norm, i.e. speakers who belong to a large group, but are acting differently from the rest of the group. This issue is partly resolved by statistical analysis models which take into account individual differences, such as mixed-effects logistic regression analysis, when drawing general conclusions (see section 5.1.2.5). Another aspect of the problem may be solved using qualitative analysis of unique speakers to help find out the reasons behind their unusual linguistic behaviour.

Further criticisms of key premises of sociolinguistics will be addressed with detail in the review of major early studies, as discussed next.

4.3.3 Major early studies in variationist sociolinguistics

As stated in section 1.2., one of the major motivations underpinning the present research is to shed light on the underrepresented variety of al-ʿAḥsāʾ Arabic. Given that this study is of potential interest to dialectologists, a review of variationist sociolinguistics is provided. The present section starts with a brief account of Labov’s (cf. 1966b, 1972a, 1973) initial work. As will be seen, Labov has generally found correlations between linguistic variation and factors such as class, occupation, ethnicity, age, regionality, style, and context. Many researchers have tried to build on these initial premises. For example, Trudgill (1974b) conducted a study in Norwich in an attempt to elaborate and expand upon some of the factors that had been investigated by Labov, such as style and class. Trudgill detected some sociolinguistic patterns that were opposite to those found by Labov. These involved ‘covert prestige’, where variants with low social evaluations become common among speakers who wish to be identified with a certain identity or group. One of the most prominent studies was carried out by Eckert (1989a), who rejected Labov’s assumption that speakers play a passive role and the way he assigns speakers to predefined social categories. Instead, she highlighted speakers’ agency and the way they actively choose to be involved in a certain community as a means of expressing identity. Another study was conducted by Milroy (1978), whose findings demonstrate the way speakers maintain local linguistic features by engaging in tight social networks, versus the way they adopt new

linguistic features by expanding social circles. A more detailed overview of these studies will be given next.

Prior to conducting his New York City department store study, Labov (1966b) carried out an exploratory investigation of New York language through the systematic observation of casual speech in order to test his hypothesis of (r) stratification. This involved the implementation of both topic (e.g. speech outside the formal interview, speech with a third person, and speech not in direct response to questions) and ‘channel cues’ related to speaker production (e.g. change in tempo, pitch range, and volume or rate of breathing, to identify casual style). Labov (1966b) then conducted his study in New York City department stores, in order to examine the social and stylistic stratification of postvocalic (r) in words such as *car* and *fourth*. He used rapid anonymous surveys in three department stores, namely *Saks Fifth Avenue*, whose employees tended to hold a high social ranking position, *S. Klein*, corresponding to low social ranking, and *Macy’s*, which lies somewhere in between. Labov tried to elicit both casual and emphatic tokens of (r) occurring pre-consonantly, i.e. *fourth*, and in final position, i.e. *floor*. He achieved this by using a factual inquiry intended elicit the phrase ‘fourth floor’ in casual style, followed by a pretence of not being able to hear the answer in order to obtain a second more formal and emphatic production of the same utterance. In addition to the type of store, which was considered as a factor, Labov paid specific attention to factors such as estimated age, occupation (floorwalkers, sales, cashier, and stockboy), floor within the store, and race. He detected an explicit linguistic stratification pattern correlating

with stores. The highest rate of [r] deletion was found in Saks, followed by Macy's, then S. Klein. With regards to style, he generally found the amount of [r] deletion to be increased in preconsonantal (r) than in final position. He also found the deletion of [r] to be more common within the emphatic style than casual style. In terms of race, black employees produced a low amount of [r] deletion; most of them were found in the low-rank S. Klein store. Labov did not generally note significant age stratification patterns in his New York study. However, when he looked into each store on its own, he detected a reverse association between [r] deletion and age in the speech of the highest social ranking group, i.e. that of Saks Fifth Avenue, where younger speakers surpassed others in the use of preconsonantal [r] deletion. The reverse association was found with speakers from Macy's, i.e. the older the speakers the more likely they were to insert preconsonantal [r]. As to S. Klein, speakers of all ages demonstrated a fairly even distribution. As to occupation, no strong differentiations were found between employees in S. Klein, something that was reflected in their homogeneous linguistic performance. In Macy's, social differences were noticed between floorwalkers (identified by red and white carnations) and sales people. This led them to be linguistically stratified; floorwalkers showed a high use of [r] deletion in comparison to sales people. In Saks, ground floor employees were found to differ from those working in upper floors. The former worked in narrow spaces cramped with large amounts of clothing items, whereas the latter group worked in more spacious areas with fewer but more fashionable clothes. Postvocalic [r] deletions were found to be used more frequently by employees working in upper floors than on the ground floor.

By raising questions related to linguistic heterogeneity and providing the methodological means for investigating these questions, Labov's New York study set the foundation for quantitative linguistic variation studies (Wardhaugh, 2010, p. 168). Labov was able to turn what was once considered 'free variation' into systematic patterns of linguistic and social correlates. Although Labov used fewer participants than his dialectologist predecessors, he was still able to obtain reliable findings by efficiently sampling participants across social groupings in a way that reduced time and effort (Gilbert, 1969, p. 475). Through the application of such methods, Labov was also able to reach greater explanatory power.

Labov's New York study has also been shown to be generalizable to the wider population and to withstand the test of time. It was replicated 24 years later by Fowler (1986), who found analogous results, and 23 years later again, i.e. in 2009, by Mather (2012). Despite finding similar results, Mather (2012) also noted a slight but measureable 10-20 percent increase in r-deletion, along with a shift towards r-deletion among lower-middle class old speakers, as opposed to younger speakers, who remained the same.

One of the main criticisms of Labov's work relates to how he considers social class a major construct of linguistic variation and change in spite of some of its limitations. Although class was found to be marginal in his Martha's Vineyard study (discussed below), he still grants it a central position in his later studies (cf. Labov, 1990, 2001b). When compared to other factors such as age and gender, the limitation of class as a social

construct pertains to the way in which it is considered ‘inherently fuzzy’ (Chambers, 1993, p. 148). Essentially, this describes the fact that class is both an abstract and materialistic concept that involves multidimensional aspects, including wealth, profession, prestige, family history, education, residence, and lifestyle (cf. al-Wer, 2002; M. J. Gordon, 2012, p. 135; L. Milroy, 1980, p. 13). The concept of class is also relativistic and may be perceived differently by individuals from different backgrounds. For instance, many Americans consider themselves as belonging to the middle-class even when they are not (M. J. Gordon, 2012, p. 136). Furthermore, class may not be universally applicable (J. Milroy & Milroy, 1985, p. 343). The use of socioeconomic indices to assign individuals to classes is also problematic in terms of possible biases that may lead to risking the validity of the research as a whole (Mallinson, 2007, p. 151). For instance, females may surpass their male counterparts in education while being paid less (Warren, Sheridan, & Hauser, 1998), potentially complicating the issue of classifying their social status.

Another limitation in this area is related to how “studies that focus on pre-existing social and regional categories tend to view identities as static: constructed as membership in a particular class, with a particular regional identity” (Bayley & Tarone, 2012, p. 45). Labov tried to overcome this limitation by following an ethnographic approach in his later Martha’s Vineyard study. Frameworks other than social class have been proposed, such as social network (Milroy & Milroy, 1985; Milroy, 1980; Milroy & Milroy, 1992) and community of practice (Eckert, 1989a) which will be discussed

more in detail in later sections. Meanwhile, further studies of Labov will be reported.

Labov's (1972a) next study took place in the community of Martha's Vineyard, Massachusetts, a secluded island on the US North Atlantic coast, which has an economy that is largely dependent on the summer tourism trade. Labov noticed a pattern of variation within the phonemic inventory, represented by the local centralisation of (ay) and (aw) as against the standard mainland non-centralised patterns brought by tourists in words such as *wife* and *house*. To carry out his study, he implemented general ethnographic observation as well as specific formal interviews with 69 speakers drawn from both upper and lower parts of the island. Speakers belonged to different age groups and occupational backgrounds, e.g. fishermen, farmers, professionals, and students. Three main ethnicities were included in the sample, namely old-family English groups, Portuguese descendants, and those of a Native American origin. Labov's findings demonstrate phonetic differences that carry social meaning. In relation to age, centralisation reached its highest levels within the 31 - 45 age group. Unlike many of their counterparts who left the island in search for better financial opportunities, this age group has willingly chosen to remain in the island. Centralisation was also found to be extremely common among rural upper-islanders (most especially among the fishermen in an area called Chilmark). By increasing their use of centralisation, Chilmark fishermen strongly associate themselves with their ancestors and assert their identity against outside pressures. In addition to this, they are simultaneously acting as a reference group for other

islanders. As to Portuguese, little or no centralisation was detected amongst the second generation of immigrants, who were those aged 45 and above. Centralisation was found to successively increase with the third and fourth generations of Portuguese, peaking amongst the youngest age group. Within this group, centralisation is even higher than the English group. Labov (1972a, p. 34) argued that this form of hypercorrection is related to their wish to establish their identity as islanders, thereby enabling them to gain recognition from others, particularly those of the Old-English group. Speakers of a Native American origin come closely behind the Chilmarkers in centralisation, despite being detached from them both socially and geographically. Having lost their own linguistic forms, the Native Americans are adopting Old-English centralisation to identify themselves as true islanders (Labov, 1972a, pp. 34–36). Through this study, Labov innovated new methods to reach a logical explanation of a very intricate sociolinguistic scene (Gordon, 2012, p. 57). His integration of ethnographic observation into sociolinguistic research has provided a better opportunity to access the vernacular. Through this study, Labov has also improved traditional interviews, from merely eliciting pronunciation of target items, to allowing participants to speak more naturally about their lives (Friginal & Hardy, 2014, p. 78).

It should be noted that the linguistic scene in Martha's Vineyard did not develop as Labov expected, perhaps due to attitudes changing with newer generations. Around four decades after Labov's study, Blake and Josey (2003) revisited the island. They found a shift in sound change, i.e. a decline in local

(ay) centralisation, related to a restructuring of the socio-economic scene as well as a change in attitude towards tourism from opposition to welcoming, leading the inhabitants of the island to be less loyal to traditional norms.

In another study, Labov (1973) provided a quantitative analysis of syntactic variation in Black English Vernacular as found in the speech of preadolescents, adolescents and adults coming from south central Harlem, New York. Black English Vernacular forms, e.g. copula deletion, negative attraction, and negative concord, are often considered as deviant from Standard English and are corrected especially among school children. Although these features were previously considered haphazard, Labov was able to establish that they follow some systematic rules. Long-term participant observations, which took place within individual interviews and group sessions, were carried out by Labov and another white assistant, who both acted as 'outsiders' to the black culture of the inner city. They were assisted by two black 'insiders' who were very familiar with the black speech community. The bulk of the interviews were casual in style, with some occasional instances of more formal language. One of the grammatical systems he examined was variation in the use of the copula, i.e. the use of full, contracted, and deleted forms. Labov noticed that copula deletion takes place in Black English Vernacular solely in positions where they are contracted in Standard English. His quantitative analysis demonstrated that the rate of deletion and contraction is primarily influenced by the form of the preceding noun phrase. Deletion increases when the copula comes after a pronoun, as opposed to other noun phrase forms. He also found several

complex constraints governing the use of negative attraction and negative concord (cf. Labov, 1973). In this study, Labov tried to incorporate his Black English Vernacular systematic variation findings within generative grammar by presenting variable rule analysis. Nonetheless, variable rules have become less popular as a sociolinguistic concept ever since.

Through his study, Labov was generally able to demonstrate that Black English Vernacular is a separate grammatical system with its own distinct rules (Labov, 1973, p. 36) and is not simply a deviant form of Standard English. This empirically-based (Burling, 1975, p. 507) finding can have significant implications for language teaching, especially given that he has offered more recognition and acknowledgement to varieties other than those considered as standard.

In his study of Black English Vernacular, Labov was able to move up the scale beyond the level of sentence through the analysis of narrative structure and ritualised insults. Nonetheless, as argued by Sands (2004, p. 54), Labov's framework of narrative analysis was in reality difficult to apply to stories, because they were spread out and interwoven with larger stories, instead of being discrete. Furthermore, some stories or narratives may be non-canonical, i.e. do not fall into 'narrative canons', such as having multiple co-tellers as opposed to the standard one teller rule (cf. Georgakopoulou, 2006, pp. 238–239; Ochs & Capps, 2009, pp. 24–26).

A limitation of this study, which applies to Labov's early work in general, is the lack of statistical significance testing. This is related to Labov's view that tests of significance are irrelevant to sociolinguistic research. Labov based this general assumption on his contraction and deletion findings, where he (1969, p. 731) states that

[t]he fact that this pattern repeats regularly in six different groups, in each style, indicates how pervasive and regular such variable constraints are. We are not dealing here with effects which are so erratic or marginal that statistical tests are required to determine whether or not they might have been produced by chance

Nonetheless, Labov's conclusion, based on his specific contraction and deletion results, may not be applicable in terms of significance to his earlier work (Macaulay, 2009, p. 53). If sociolinguistic variation is to be considered a serious discipline then it is essential "to distinguish truly random variability from conditioned variability" (Fasold, 1972, p. 33). It must be noted, however, that remarks associated with statistical significance are stated with the acknowledgement that Labov's early studies were conducted a long time ago and that increased attention has been given, ever since, to the statistical side of sociolinguistic analyses. However, since these are classic studies, which have established the foundation for sociolinguistic research, their results need to be reported with a cautious consideration of this limitation.

Another remark applicable to Labov's work in general, is related to how interviews may be insufficient for studying grammatical variation, despite providing data well suited for phonological or lexical variation. This

is related to the relatively infrequent and abstract nature of grammatical constructions, which makes them difficult to elicit in a natural way (Grieve, 2009, p. 19). Corpus-based methods are generally considered more appropriate than variationist sociolinguistics for the study of grammatical variation (Grieve, 2009, p. 19). However, this should be understood as relativistic and dependent on the nature of the variable under investigation, as well as its degree of frequency.

Trudgill's (1974b) study on the co-variation of phonological variables with social patterns in the urban dialect of Norwich, England represents one of the early attempts to apply Labov's framework outside the United States. Trudgill investigated three consonantal variables and thirteen vocalic variables. Linguistic variation was between local Norwich variants and standard 'received pronunciation' (RP) forms. Since such variations were found in the speech of most Norwich speakers, they were considered as part of a single system. Variation was, thus, described in terms of inherent variability rather than part of dialect mixture. Three social parameters were considered in the analysis, namely social class, social context, and sex. Trudgill implemented a more elaborate and complex social class system than the one used by Labov in his New York study which had only three classes (upper-middle class, middle-class, and working class), based on where the participants worked, i.e. Saks Fifth Avenue, Macy's, or S. Klein. In Trudgill's study, participants were assigned to five social classes, i.e. middle middle-class (MMC), lower middle-class (LMC), upper working-class (UWC), middle working-class (MWC), and lower working-class (LWC), based on an

index score of six indicators: occupation, income, education, housing, locality, and father's occupation. The choice of parameters is influenced by the social characteristics of the study population, i.e. that English people are generally considered to be more class-aware than Americans (Trudgill, 1972, p. 188).

Unlike Labov's simple binary stylistic investigation, which was based on eliciting a casual utterance of 'fourth floor' followed by a second more formal and emphatic production of the same utterance, Trudgill implemented a more sophisticated interview procedure in the attempt to elicit a series of contexts ranging from the least to the most formal style: speech in the main body of the interview (formal style), reading style, word list style, and pairs of homophones. In order to identify casual speech within interviews, Trudgill utilised Labov's 'channel cues', examples of which are found when a participant speaks about a topic outside the context of the questionnaire, when speech is not directed to the interviewer, and when the interviewee gives a narrative.

Trudgill (1974b, pp. 91–96) found that certain variables, such as (ng), (t), and (ā), exhibit some regular patterns of correlations with differentiation in style and class. For instance, with the (ng) variable, which is realised as [n] or [ŋ] in words such as reading and walking, he found the use of the non-standard variant [n] to be extremely common in the lower working class. Within all social classes, the use of the non-standard variant [n] increased as speakers moved from formal styles to more casual styles. In relation to gender, Trudgill found males to surpass females in the use of the non-

standard form. Females have over-reported themselves for using the standard form; whereas men under-reported their use of the standard form. This indicates a discrepancy between men and women with regards to their views of prestige. Women seem to consider standard forms prestigious because they indicate high social status, whereas men associate prestige with localised speech to express in group solidarity (Trudgill, 1972, p. 188). The two cases represent what Labov describes as overt and covert prestige respectively. In his New York findings Labov (1966a, p. 108) stated that

the socio-economic structure confers prestige on the middle-class pattern associated with the more formal styles. [However,] one can't avoid the implication that in New York City we must have an equal and opposing prestige for informal, working-class speech - a covert prestige enforcing this speech pattern. We must assume that people in New York City want to talk as they do, yet this fact is not at all obvious in any overt response that you can draw from interview subjects.

Overt prestige takes place when speakers approximate variants used by a socially and culturally dominant group, such as RP in England. In contrast, covert prestige occurs when speakers consider variants associated with lower or working classes as carrying value linked with different social meanings. Although Labov discussed covert prestige, he did not investigate it quantitatively in his New York study, where he found the prestigious variant, i.e. [r] deletion, to be associated with higher social classes in a form of overt prestige. Trudgill (1972, p. 188) ascribed the occurrence of covert prestige in his Norwich study to differences between the American and British class systems. He (1972, p. 188) states that the working class in Britain have not

readily assimilated into the middle class the same way Americans did. This is because Americans are said to be less aware of class boundaries. While overt prestige is related to ‘change from above’, covert prestige is often associated with ‘change from below’. According to Trudgill (1974b, p. 95) ‘change from above’ is usually advanced by females; whereas ‘change from below’ is led by males.

With other variables, e.g. (a:), (o:), and (yu), Trudgill (1974b, pp. 96–99) found irregular patterns of style and class differentiation. For example, although the (a:) variable, which is used in words such *cart* and *path* with various realisations ranging from the back RP type [ɑ:] all the way through the very front [a: ~ ã:] vowel, demonstrates notable class differentiation, it shows little or no stylistic shifting, perhaps because it is not overtly stigmatised by speakers. Variables like this parallel what Labov (1972a, p. 314) describes as indicators (see section 4.3.4) which are associated with stable variation. This is based on the assumption that social consciousness, which leads to stylistic variation, is increased with variables which are undergoing linguistic change (Trudgill, 1974b, p. 103).

This leads Trudgill (1974b, pp. 104–105) to discuss the characteristics of other variables more commonly perceived to be reflective of a change in progress as supported by a regular increase of the new variant as we go from older to younger speakers. Typical of these is the (e) variable, which may be realised as [ɛ], [ɜ], or [ʌ], when it comes before /l/ in words such as *bell*, and *well*. This variable is considered to be engaged in a rapid change in progress

towards centralisation primarily based on a high increase in centralisation as we go from older to younger speakers.

One of the drawbacks of Trudgill's study has to do with the way he (1974b, p. 91) reported his results without considering any test of significance, which he justified through reliance on Labov's previously discussed assumptions on the value of significance tests in sociolinguistics. Earlier discussed drawbacks of class as a social construct hold here as well.

Concerning the ability of the study to predict future norms, Trudgill (1988) conducted a follow-up investigation 15 years later. The participants of this later investigation were 15 speakers who were either too young, or not born, at the time of his first investigation. Trudgill selected an interviewer who was young and who had never left Norwich, in an attempt to mirror himself when he conducted the early study. Trudgill (1988, pp. 40–44) detected some slight limitations to the apparent time study where he either spotted some changes that were not considered as such in the early study, e. g. the rise in the use of the labiodental approximant as a realisation of /r/. Other than that, his (1988, pp. 47–48) real-time results can be summarised in the following three main points. Firstly, some variables underwent extraordinarily rapid changes, e.g. th-fronting, due to a multitude of linguistic and social factors, whereas others had advanced more slowly, e.g. h-dropping. Secondly, certain linguistic changes were found to be system-internal, e.g. the diphthongisation of the TRAP vowel, while others came about as a result of geographical diffusion, e.g. h-dropping. Thirdly, some changes were

attributed to changes in the speech of younger generations, e.g. r-labialisation, while others affected even post-adolescents and adults, .e.g the merger of vowels in pairs like NEAR and SQUARE.

Another classic work was carried out by Eckert (1989a) on the community of practice. According to Eckert (2012), the history of the study of linguistic variation can be divided into three main waves. Each wave establishes the ground for the one following. Each generation of study does not necessarily supplant its predecessor, but rather supplements it. The first wave is represented by the Labovian-style quantitative studies, which examine associations between linguistic variation and macro-sociological categories, such as class, gender and age. Rather than presupposing social structures, the second wave implements micro-level ethnographic investigations conducted within smaller communities, which attempt to discover salient social categories that are associated with linguistic variation. Milroy's (1980) study on the relationship between phonological variation and social networks in the working class community of Belfast represents this wave (see next section). Another study representing this wave is the one carried out by Cheshire (1982) on the correlation between morphosyntactic features and two groups of working-class adolescents, who regularly attend two different parks in Reading, England. The third wave was proposed by Eckert. Unlike the first and second waves, which view variation as a by-product of social stratification, the third wave stresses the agency of speakers and the way they use variation to construct social meaning. Within the third wave, social structure is not considered as a fixed form imposed on members of the

society. Instead, the relationship between social structure and members of the community is regarded as reciprocal and dynamic, i.e. social structures delineate practices and ideologies of speakers; while speakers' practices and ideologies help create and recreate social structure.

Eckert's (1989a, 2012) study falls within the third wave. She implemented 'participant observation', a qualitative data collection technique whereby the researcher observes participants in their daily life, to examine the social and linguistic characteristics of high school students in Detroit, USA. In so doing, she noticed a pattern of social stratification mainly between two groups of students, namely the *Jocks* and the *Burnouts*. A third group described as "in between" the Jocks and the Burnouts, did not show strong social identities of their own. The Jocks predominantly belonged to the middle class, whereas the majority of the Burnouts came from the working class. The Jocks were generally described as being diligent and hard working. They aspired to go to college. Both their identities and social networks were highly associated with extracurricular activities at schools. In contrast, the Burnouts considered the school a mere vocational step to blue-collar industrial jobs. They were also less interested in attaching themselves to other members of the school, both in terms of identity and social interaction. Their social life was, instead, more centred on neighbourhood bonds. The social discrepancy between the Jocks and the Burnouts showed itself in symbolic forms such as clothing and language. The Jocks tended to wear school jackets; the Burnouts wore jackets with the word Detroit on them. Linguistic differentiations related to features such as negative concord, the backing and

rising of (ay), and the Northern Cities Shift, were evident between the two groups.

Eckert (2012) made a significant observation regarding the way broad terms, such as 'gender', may sometimes obscure internal clusters with complex differences that relate to the social positions held by individuals. For instance, although Jock boys, who participate in varsity sports, were found to resemble their female athlete counterparts in their use of linguistic variants, a form of indirect indexicality is involved. Girls do not share the same social values for sports as boys, but they engage in the same social activities as the Jocks and this is how they mainly obtain their status as Jocks. In addition, Burnout boys were generally found to exceed their female counterparts in the use of vernacular variants, but a specific group within the Burnout girls, namely the burned-out girls, i.e. the wilder and more rebellious girls, were found to exceed not only Burnout boys, but in fact the whole school in the use of urban vernacular features. Hence, linguistic differences are not indexical of biological differences, i.e. male vs. female, but are more related to the social stance each group holds.

Eckert's use of participant observation allowed her to gain local insights into the structure of the society she was studying, instead of applying presupposed social constructs. Ethnographic observation enabled her to focus on a wide array of qualitative remarks related to style, school boundaries and so forth. This, in turn, allowed her to shed light on the dynamics of social reality and how they are related to linguistic choices (Ammon, Dittmar, &

Mattheier, 2005, p. 964). The merit of focusing on micro-level situated experiences “synchronises well with post-modern uncertainty about grand theoretical totalisation” (Rampton, 2006, p. 15). It is claimed that micro-level results are linked with macro social grouping contexts (Elder-Vass, 2012, p. 104). Nonetheless, there are some concerns regarding the generalizability of the community of practice scheme as will be seen below.

Meyerhoff (2002, pp. 527–528) defines community of practice in terms of three criteria: i) mutual engagement of the members who meet to perform the practice, ii) sharing a specific jointly negotiated enterprise that is pursued accountably by members of the community, and iii) having a shared repertoire that can be linguistic or otherwise. Through application of a community of practice framework, it is practice rather than demography that shapes social categories (Moore, 2010, p. 103). However, this raises the question of the universal applicability of this framework beyond the level of school, where community of practice is most applied. Effectively, this means that we must consider whether all members of the speech community are engaged in prolonged practices with groups of speakers who share parallel perspectives of self-identification to the point that it is reflected in their speech. In this regard, Meyerhoff (2002, p. 538) draws on the work of Bergvall (1999) who notes that community of practice is mostly applied to a specific age cohort, i.e. adolescents, who are most aware of their identification of self-image and the way they are differentiated by others. Nonetheless, Meyerhoff (2002, pp. 529–534) argues against the notion that the community of practice theory may limit the perspective of the speech

community to adolescents, saying that it has been successfully applied to other contexts. An example of such contexts is a study, which is sympathetic with the community of practice approach, conducted on women working in plumbing or carpentry (Castellano, 1996). However, by drawing on specific contexts where community of practice plays a role in linguistic stratification, speakers who are not engaged in any specific community of practice are necessarily left out of these studies.

Another predominant study is the one carried out by Milroy (1978; 1987), who proposed a novel amalgamation of Labov's (1973) data collection technique, which requires an insider to obtain data from the particular community being investigated, and that of Gumperz (1982), which relies on data collection by an outsider observer who does not interfere with interactions taking place within self-recruited groups. She did so by approaching the community using the 'friend of a friend' method, whereby she used mutually known acquaintances to place herself in a medial position on the 'insider' – 'outsider' continuum. This position allowed her to gain access to various types of speech styles that may not have been readily available if she had been either an 'insider' or an 'outsider'. The focus of her study was on the vernacular of three working class communities of the inner city of Belfast: the Protestants of Ballymacarrell (East Belfast), the Protestants of Hammer (West Belfast), and the Catholics of Clonard (West Belfast). The three communities were described as having been 'blighted' by various social conditions, including high rate of unemployment, illness, and juvenile crime. Milroy examined the patterning of eight linguistic variables in relation to age,

gender, and area. Holding these constant, she implemented a network strength scale to measure the degree of 'density', i.e. the number of ties that link a group of people, and 'multiplicity', i.e. the type and complexity of social ties, e.g. a friend, kin, or neighbour.

Milroy's (1980) findings indicate that "there is little significant correlation between language use and network structure" (p. 159), except in the neighbourhood of Ballymacarrette. The pattern observed in Ballymacarrette is characterised by a sharp divide between men and women in network scores, reflected in language usage, where men maintain more vernacular norms than women. The men in Ballymacarrette are generally employed and have very dense multiplex networks with locally-based homogeneous groups of colleagues; whereas Ballymacarrette women, who are also largely employed, maintain loose networks with kin and neighbours and to a lesser degree with co-workers. Apparently, Ballymacarrette community norms, which preserve traditional roles of men and women, encourage a specific form of network structure that is reflected in linguistic usage. The general conclusion reached by Milroy is that living in a relatively close-knit group leads to the maintenance of in-group variables, whereas living in a relatively loose-knit one leads to innovation and variation.

According to Milroy, differences between men and women were minor in the Hammer study. In Clonard, patterns of differentiation were obscured by complex sex and age interactions. In both areas, sex patterns were disturbed for reasons such as enforced geographical relocation or high

unemployment levels associated with less multiplex network ties. Milroy noted that some variables may function as network markers for either women or men without being considered as sex markers. She also found that certain linguistic variables function as network markers but have a complex association with different age groups. In relation to age, considered on its own, Milroy found that local vernacular features are retained by younger speakers in Clonard and Hammer, and by older speakers in Ballymacarrette.

The fact that social network was only found to be applicable in Ballymacarrette raises questions about the generalizability of Milroy's findings. Labov (2001b, p. 333) discusses further limitations related to the relatively small sample size, i.e. only 46 speakers, which inevitably restricts the study of interactions between age, gender, neighbourhood and network. Labov (2001b, p. 333) also criticises her sole focus on working class without viewing the broader social context. In addition, he (2001b, p. 333) draws attention to the special nature of European speech communities, where overtly stigmatised variables are the ones which either withdraw or expand compared to North American changes which predominantly come from below, such as the change in the Philadelphia vowel system. Labov (2001b, p. 328) favours the way in which Eckert used ethnographic observation not only to reach compact quantitative correlations between social categories and linguistic choices, but also the way she qualitatively elaborated on other social aspects such as clothing, cruising patterns, location and so forth. Nonetheless, he (2001b, p. 328) stresses the need to investigate the question of whether social network can replace broad social categories that include age and gender or

whether they should be treated as complimentary to our understanding of these broader categories.

An additional limitation relates to how Milroy (1980, p. 200) herself admits a lack of consistency and reliability as regards the association between an individual's network score and their particular attitudes towards the vernacular, given that the status of an individual's network strength (whether weak or strong) is not always related to a personal preference of association or disassociation to a certain group, as it may also be subject to force of circumstance.

Milroy's Belfast study has been further criticised by Murray (1993, p. 165), primarily on the grounds that more than a third of the correlations reported lack statistical significance. Labov (2001b, p. 331) conducted a multivariate analysis of the Belfast study in which he found more or less parallel results; spotting some insignificant correlations as well. Murray (1993, p. 161) also states that interactions within social networks are often overlooked. Murray (1993, pp. 161–165) adds that interactions within social networks are customarily omitted, noting that comparisons between groups that have different ranks in social network are also often misrepresented (1993, p. 165). To explain, Murray (1993, p. 165) states that correlations in Milroy's study involve

the incautious assumptions that working at the same place as at least two other persons of the same sex from one's residential areas makes one twice as integrated (network-embedded) as living

in the same area as one other household containing (an unspecified degree and number of) kin, which is itself twice the (integration) value of “membership of a high-density, territorially based cluster”.

The present study has been influenced by the foregoing review of selected, classic studies, including Labov’s (1966b) New York City department store study; Labov’s (1972a) Martha’s Vineyard study; Labov’s (1973) Black English vernacular study; Trudgill’s (1974b) Norwich study; Eckert’s (2012) speech community study; and Milroy’s (1978; 1987) social network study. It has also benefitted from the details provided by some respected follow-up investigations of classic studies, such as Fowler (1986) and Mather’s (2012) study of New York City department stores, Blake & Josey (2003) study of Martha’s Vineyard, and Trudgill’s (1988) study of Norwich. In accordance with the classification provided by Eckert (2012), the present study falls into the first wave of socio-linguistic studies. It is based on a quantitative Labovian-style approach, i.e. one similar to that followed in the New York City department store Martha’s Vineyard studies, in which phonological and morphophonemic variations are examined in relation to micro-level social categories that include socio-sectarian affiliation, gender, age and education. Labov’s (1973) work on the Black English Vernacular drew attention to levels of analysis higher than the phoneme or the morphophoneme, such as grammar or narratives. However, the review of this study has highlighted certain difficulties involved in the investigation of such levels. Grammatical forms, for instance, are considered to be infrequent and therefore may better be studied through other means of analysis, e.g. corpus

linguistics. On the other hand, the narrative analysis framework is difficult to apply to actual stories, which could be non-canonical and indiscrete. Both levels of analysis are considered beyond the scope of the present study. Nevertheless, the present study incorporates one important element from Labov's (1973) work on the Black English vernacular, which is the use of 'insiders' to gain access into the speech community (see section 5.1.1.2). A further insight relates to the type of recognition that Labov's (1973) has brought to the Black English Vernacular, which helped to establish it as systematic variety composed of well-formed set of rules, rather than it being considered a badly spoken version of standard English. Given that al-'Aḥsā' dialect, like other Arabic dialects, is widely considered as deviant from Standard Arabic, the present study aims to highlight its systematic nature and to thereby grant it some measure of recognition.

In one early attempt to apply Labov's framework outside the United States, Trudgill (1974b) conducted a study in Norwich and found English people to be more aware of class than Americans. This finding led him to implement a more elaborate class system than the one used by Labov (1966b) in his New York City study. This indicates a recognition that the selection of factors for investigation should be largely dictated by the characteristics of the society under examination, rather than being selected on the basis of what applies to other societies. In accordance with this position, the present study implemented socio-sectarian affiliation as a social factor, because it plays a more dominant role than class in defining the social structure of al-'Aḥsā'. This is especially important given that socio-sectarian affiliation involves a

divide in family relations between the two socio-sectarian affiliations, which maintain endogamous marital relations (see section 2.5). In Saudi Arabia in general, as well as other neighbouring countries such as Jordan and Iraq, family ties play a more important role than class in defining social positions (cf. Holes, 2007, p. 545).

Another important factor to consider is how Trudgill's (1974b) findings show that change from above is more common in Norwich than in the United States. The findings of the present study also indicate that change from above is more common in the dialect of al-'Aḥsā' than change from below (see sections 6.4 and 7.4.1). Trudgill (1974b) has also provided a quantitative analysis of covert prestige, which can be seen in the present study (see sections 7.4.1). In addition, this study has attempted to incorporate elements from the second wave approach, as represented by the work of Milroy (1978; 1987), such as the use of social networks. However, this approach was ultimately found to be irrelevant (see section 5.1.2.3), as well as the "friend of a friend" method for the recruitment of participants (see section 5.1.1.1). The third wave approach, as exemplified by Eckert's (2012) work, was not considered in this study. This decision was made because it was not possible to carry out an ethnographic observational study that includes male participants in the society under investigation, as elongated casual interactions between females and non-close male relatives are not socially acceptable within the Saudi culture. This approach was also abandoned to avoid leaving out any speakers who are not engaged in any potential community of practice. However, ethnographic evidence on the views of speakers regarding the

investigated variables was provided by posing qualitative questions at the end of interviews (for more details on research methods see Chapter 5).

On the topic of follow-up studies, which compare data obtained in classic studies with more recent ones, Fowler (1986), Mather (2012), and Trudgill (1988) provide supportive evidence on the continuation and progress of linguistic change in variables previously reported to be undergoing a change in progress. However, Trudgill (1988) has also provided evidence regarding the ways in which certain linguistic variables may undergo change, even when they were not formerly considered as so. In addition, Blake & Josey (2003) observed that a specific linguistic variable that had previously been undergoing change had stopped and moved in a new direction due to shifts in the social scene (more details on replica studies are provided in section 5.1.2.3).

4.3.4 Dialect contact and linguistic change

The present section is concerned with the social and spatial mechanisms of language change which usually arise as a result of language contact. While descriptive approaches, which aim to provide synchronic analyses of uniform states of language, typically overlook linguistic change, historical linguistics and sociolinguistics grant it a primary position. Historical linguistics seeks to diachronically investigate linguistic change or maintenance through the comparison of discrete states of languages at successive stages. It has, however, been criticised for its inability to “provide a true picture of the unbroken continuity of a language in time” (Bynon, 1977, p. 2). The

methodological basis of historical linguistics leads to a position where “[l]anguage evolution, although observable retrospectively in its results, appears to totally elude observation as a *process* while it is actually taking place” (Bynon, 1977, p. 2). Sociolinguistic research aims to address this gap through the examination of linguistic change as it takes place in process, by looking at the way different social, linguistic, and spatial mechanisms influence linguistic diversity and advance change. The source of linguistic change is traditionally explained using either the family tree model or the wave model. The family tree model is based on grouping related languages into trees or hierarchies based on genetic relatedness. Within this model, change is described as an internal process. In contrast, the wave model seeks to explain the way in which linguistic features spread across different branches of trees. Changes within this model mostly appear as a result of external influences that take place in contexts of bilingualism, pidginisation, and creolisation (cf. Labov, 2007, pp. 1–2).

Using these two models, Labov (2007) introduces the concepts of ‘transmission’ and ‘diffusion’. Transmission fits within the family tree model and is described as a continuous process by which children acquire their native tongue from antecedent generations. In this approach, “[t]he continuity of dialects and languages across time is the result of the ability of children to replicate faithfully the form of the older generation’s language, in all of its structural detail, with consequent preservation of the distances of the branches of the family tree” (Labov, 2007, p. 3). Labov’s (2007) notion of transmission expands to cover situations where children make linguistic

changes or produce unfaithful preservations of previous varieties. These kinds of changes are part of “change from below”, i.e. from inside the linguistic system, as opposed to “change from above”, i.e. from outside the linguistic system. Internal linguistic changes may be influenced by extra-linguistic factors which may be social, cognitive or physiological (Labov, 2007, p. 3) and are subject to *incrementations*, i.e. successive extensions that evolve over many generations (cf. Labov, 1994, pp. 391–417, 2007, p. 3). In such situations, especially where variable forms are involved, transmission becomes selective, as children choose innovative forms as part of regularisation and homogenisation processes. By contrast, diffusion, which is applicable within the wave model, is used to describe the way one branch of a tree is influenced by another distinct branch via acts of communication between the speech communities of both branches (Labov, 2007, p. 4).

With regards to these linguistic change mechanisms, Labov cites two contrasting views in determining whether transmission or diffusion should be given primacy. The first view is presented by Ringe, Warnow, and Taylor (2002) and is based on the assumption that linguistic variation primarily occurs within the medium of transmission, with diffusion playing a less significant role in linguistic change. Schmidt (1871) takes the opposing position, arguing that diffusion is a more influential mechanism of change. This argument holds that different branches of Indo-European languages show more resemblance when they are geographically close (Schmidt, cited in Bloomfield, 1933, p. 317). Therefore, Schmidt (as cited in Bloomfield, 1933, p. 317) proposes that linguistic change spreads spatially in successive waves,

creating webs of linguistic isoglosses, where similarities fade as the distances between different locations increase. Labov (2007, pp. 4–5) tries to explain the reason why distinct languages develop and disrupt continuums by saying that such situations happen as a result of a secondary process which occurs when a financially or politically dominant group of speakers diverges from the norm and starts to spread their own linguistic system over nearby areas. The first view is strongly endorsed by Labov (2007, p. 5), who considers transmission and incrementation more fundamental sources of linguistic change than diffusion. Nonetheless, Labov highlights that the definition of transmission should rely on how the boundaries of the speech community undergoing change are defined (2007, p. 5). Labov asserts that transmission is associated with child language acquisition; whereas diffusion is a property of adults because they have better access than children to contact with other speech community members. One of the studies that lends credence to this theory was conducted by Modaresi (1978), who compared the social distribution of Persian pre-nasalised /a/ raising in the capital city of Tehran against a small city named Ghazvin. During this study, he found that vowel raising was generally more common in Tehran than in Ghazvin. In Tehran, the degree of vowel raising diminishes within higher social classes. The two cities exhibit different patterns of educational stratification. The higher the education level of speakers in Tehran, the less likely they are to produce (a) raising. By contrast, the more educated the speakers in Ghazvin, the more they raise (a). These findings are explicable in terms of the high level of contact that educated adults of Ghazvin have with speakers from Tehran, which has increased their degree of exposure to the (a) raising sound. Such

external influences on the speech of Ghavzin adults have helped to create a pattern of prestige opposite to the one found in Tehran. Children are also influenced, but only in an indirect manner. Adult linguistic diffusion of change is subsequently transmitted to children.

According to Labov (2007, pp. 54–55), internal transmission and incrementation of linguistic change, which is more common among children, involves higher levels of systematicity and complexity of linguistic constraints compared to external diffusion processes, more found among adults (Labov, 2007, pp. 54–55). He supports this claim by drawing evidence from several studies dealing with the diffusion and the consequent transmission of New York City's short (ɑ) pattern to other dialects in the United States. Several types of phonetic constraints govern the use of (ɑ) in New York City. One of the types, common both in New York City and across Mid-Atlantic States, involves complex phonological, grammatical, stylistic and lexical conditions. Babitt (1896) looked into the distribution of tense and lax vowels in New York City and its surrounding areas. He found that both groups use tense variants when they occur before some onset nasal, i.e. nonvelar clusters, and all onset voiceless fricatives, i.e. labiodental, interdental, and alveolar. However, he also found that younger speakers have it in all front nasal codas and all voiceless fricatives, as well as in all voiced stops. Hence, transmission has resulted in constraints being expanded and being more complex. On the other hand, Labov (2007, pp. 18–19) found that the diffusion of New York City's short (ɑ) system to Northern New Jersey resulted in it losing one of its original New York City constraints, which

helped to preserve the contrast between function words with simple codas and complex codas, e.g. having a tense vowel in *can't* and a lax vowel in *can* to maintain differentiation especially when /t/ becomes elided. These kinds of distinctions are lost in the New Jersey dialect.

Even if we agree with Labov that transmission plays a more fundamental role in consolidating and stabilizing linguistic change, it is still essential to understand the mechanisms under which linguistic change first takes place. It is therefore necessary to address the question of how diffusion of linguistic innovation takes place, who facilitates this change, and why differences occur in the degrees of diffusion across geographical areas.

Some researchers ascribe changes in vernacular norms to the influence of media, such as TV. For instance, an investigation was conducted into the speech of inner-city Glaswegian adolescents, examining the change towards th-fronting and l-vocalisation, which are typical of the Cockney dialect of London. The rapid linguistic diffusion of these linguistic features in Glaswegian vernacular was found to be accelerated by the strong level of engagement with the London-based TV soap drama *EastEnders*. Local street style and contact with friends and family from London were also shown to play an influence on these kinds of changes (Stuart-Smith et al., 20013). Along similar lines, Carvalho (2004) investigated the influence of TV on /di/ and /ti/ palatalisation, which are characteristic of urban Brazilian Portuguese, in the Uruguayan Portuguese spoken in Rivera, a bilingual town on the Uruguayan–Brazilian border. Exposure to Brazilian TV was shown to play a

major role in the advancement of linguistic change in Uruguayan Portuguese (Carvalho, 2004). However, TV was not the actual cause of change per se; instead, change occurred due to the positive attitudes that speakers felt towards the target variety, which enabled TV to act as a linguistic model.

According to Trudgill (1986, pp. 40–41), face-to-face interactions play a more fundamental role than mass media in spreading linguistic innovations. He argues that if the opposite were true, then we would expect to see all parts of the country adopt a certain innovation at the same time. He acknowledges that exceptions might take place when highly salient linguistic features become fashionable. This mostly appears when there are considerable differences between local dialects and a national standard variety and where speakers make a conscious effort to imitate and copy the standard.

The point where speakers begin to alter their speech usually occurs during face-to-face interactions as part of accommodation processes. Accommodation theory originated as “a strictly sociopsychological model of speech style modifications” (Giles, Coupland, & Coupland, 1991, p. 2). It was primarily focused on accent mobility which refers to “the ability of an individual to modify his accent or pronunciation” (Giles, 1973, p. 89) along an accent continuum which ranges from highly standardised speech forms to extremely localised linguistic features (Giles, 1973, p. 89). Such interpersonal accommodation processes may take two directions.

[I]f the sender in a dyadic situation wishes to gain the receiver’s social approval then he may adapt his accent patterns towards that

of this person, i.e. reduce pronunciation dissimilarities - accent convergence. On the other hand, if the sender wishes to dissociate himself from the receiver (maybe because of unfavourable characteristics, attitudes or beliefs), then there may exist tendencies opposed to the receiver, i.e. emphasise pronunciation dissimilarities - accent divergence (Giles, 1973, p. 90).

Trudgill (1986, p. 3) argues that Giles' linguistic accommodation model may be applied not only to contexts where speakers differ socially but also regionally, and to both long-term as well as short-term processes. Since dialect contact may cause linguistic change, regionally based long-term accommodation processes are of major interest to linguists (Trudgill, 1986, pp. 1-3).

When speakers of different dialects interact, either short-term accommodation or non-accommodation processes may occur. The former usually appears in case of mutual favourable attitudes. Countless face-to-face interactions among speakers of different dialects or linguistic varieties will typically give rise to convergence which is defined as "partial similarities increasing at the expense of differences" (Weinreich, 1954, p. 395). This involves linguistic unification, focusing and homogenisation of the linguistic repertoire (Auer et al., 2005, pp. 1-2). On the other hand, if speakers have negative attitudes towards each other or wish to maintain their own distinct identities, then they will resort to dialect divergence, ultimately leading "to linguistic diversification, growing diffuseness and heterogenisation - although divergence may lead to focusing in a repertoire, making the varieties which survive the process more distinct from each other" (Auer et al., 2005, p. 2).

Dialect divergence may develop as a result of an augmentation of barriers between speech community groups. These barriers may be physical and therefore related to natural boundaries, such as mountain chains or rivers, as well as to changes in geographical distances caused by immigration. Other barriers are man-made and are typically related to political, tribal and ethnic segregations. Below are selected examples of dialects that have undergone dialect convergence, followed by others which have been shaped by divergence.

Christen (1998) studied convergence through an examination of the speech of young speakers of Swiss German dialects originating from different parts of Switzerland. The focus of her study was on differences at the level of phonetics/phonology, morphology, syntax, and lexicon. She noted an overall convergence between Swiss German dialects accompanied by a slight divergence from standard German. The highest level of convergence to standard German was found to be occurring at the level of lexical items, whereas the greatest degree of divergence was occurring at the phonological and morphological levels. This was explained in terms of economy in communication between polylectal German groups, where local affiliation is expressed by means that do not hinder communication, especially given that phonological and morphological differences can be easily deciphered by speakers of different dialects. In contrast, unknown lexical items create a much greater difficulty for communication.

A related study was conducted by Nardy, Chevrot, and Barbu (2014) who performed a longitudinal follow-up study of 11 French kindergarten children. The participating children were from the suburbs of Grenoble, a city in the French Alps, and were first studied at the age of four and then at the age of five. The investigation looked at children's use of three linguistic variables, namely the optional liaison; the use of postconsonantal (R) in word final position and in the word *parce que* 'because'; and the pronouns *il(s)* 'he'/'they' and *elle(s)* 'she'/'they'. These variables were examined in relation to interaction frequency, teacher's speech, self-reported interpersonal interactions, and the children's intuition or awareness of corrective or standard sociolinguistic norms. The study found that children generally converged with each other after a year of extensive social interactions. The other factors examined were not found to have an influence on children's speech.

Another study showing an instance of dialect convergence was carried out by al-Qouuz (2009) on Sunni and Shiite school children in the first, second, and third years of primary school in Bahrain. In the study, Shiite children were found to increasingly adopt the Sunni variant [j] of (g), instead of the Shiite [g] variant, as they moved from the first to the third year of school (for more details on this study see section 6.2.4).

In relation to dialect divergence, Labov & Harris (1986) studied the linguistic differences between black and white speech communities in Philadelphia. Harris relied heavily on his interconnected networks of family

and friends, which he gradually expanded to access the speech community. The white speech community consisted of different ethnicities including Irish, German, Italian, and Polish. The boundaries between these ethnicities have progressively diminished as newer generations started to realise that none of them was foreign any more. The white group was shown to have a linguistically homogeneous linguistic system, in which certain features passed freely from one ethnic group to the other. In contrast, the black community was found to be gradually becoming more and more segregated from the white groups in residential, economic, and educational terms. The Black English dialect of Philadelphia is said to be closer to other American Black English vernaculars, such as those found in Los Angeles and New York, than the white dialect of Philadelphia. Labov & Harris (1986) showed that despite the forces of assimilation and convergence, represented by mass media or education, the vernacular of the core of the black community is growing increasingly divergent from that of the white groups. They (1986, p. 20) rationalised this by noting that vernaculars are better acquired from peers or prestigious groups than from media or education. However, class was also shown to be a potential factor. Some upwardly socially mobile black speakers, such as musicians, politicians, and athletes, were found to exhibit a closer approximation to the white vernacular, bolstered by an increased level of regular interactions with white speakers than the remainder of the black community. Under such conditions, linguistic influences are said to be unidirectional, going from the white group to the black community. This is based on evidence that white speakers who are socially integrated into the black community do not show any grammatical shifts towards the Black

English vernacular. In contrast, social networks have been found to offer ‘‘little explanatory value for individual differences in the linguistic system’’ (Labov & Harris, 1986, p. 21). The social history of black speakers, i.e. their contact with other groups, was found to have a greater influence on their speech than network ties.

Germanos (2007) carried out a study that examined divergence in greeting forms as found in several parts of Beirut and its suburbs. Her focus was on the influence of religious denomination (as indicated by location), gender and age. She conducted her study at shops (newspaper kiosks and grocery stores), doctor’s offices, and fast-food outlets. The most common greeting forms that she encountered were *bonjour*, *marḥaba*, *hi*, and *as-salāmu ‘alaykum*. The term *bonjour* was more commonly used in business centres found in east Beirut, an area that is dominated by Christian groups, than in the predominantly Muslim west Beirut. She also noted that the word *bonjour* was used more often by women than men, and more frequent in formal situations than informal ones. On the other hand, the use of *marḥaba* was found to correlate with gender, context, and age. Unlike *bonjour*, *marḥaba* was more frequent among men than women and more common in informal settings, such as grocery shops, than formal ones, like doctors’ offices. Germanos also noted that *marḥaba* was especially commonly used by speakers aged 40–59. In contrast, the word *hi* was found to be typical of young speakers, especially females. *As-salāmu ‘alaykum* was mostly used by men and in grocery shops. It was predominantly used in territories that were principally inhabited by Shiites, such as Nwayri, Sbra, and Ḥāret Ḥrayk. Additionally,

two uncommon forms, which are loans from Armenian, *barew* ‘hello’ and *bari irikown* ‘good evening’, only occurred in two areas: Nabā and Burj Hammūd, where large populations of Armenians live. In these areas, older speakers preferred *bari irikown*; younger speakers used *barew*. Germanos argued that Armenian group identity is expressed using these formulae, which function as sociolinguistic markers.

Trudgill (1986) provides an in-depth discussion of the mechanisms underlying linguistic change. According to him (1986, p. 127), dialect convergence amounts to new-dialect formation or koinéisation which “covers the processes of mixing, levelling, and simplification” (p. 127). Levelling implies “the reduction or attrition of marked variants” (Trudgill, 1986, p. 98), where the term ‘marked’ refers to “forms that are unusual or in a minority” (Trudgill, 1986, p. 98). Very often, demographic factors determine which group’s linguistic features will be reduced (Trudgill, 1986, p. 126). Simplification, on the other hand, leads to “an increase in regularity” (Mühlhäusler, 1977 as cited Trudgill, 1986, p. 103), which may pertain to expression, such as greater morphophonemic transparency, loss of inflections, reduction of syntagmatic redundancy, and loss of morphological categories, or to an agreement between form and meaning (cf. Mühlhäusler, 1977 as cited in Trudgill, 1986, p. 103, 2011, pp. 20–21). Simplification entails that even marked “minority forms may be the ones to survive if they are linguistically simpler” (Trudgill, 1986, p. 126). When speakers start to use such features in contexts that no longer require accommodation, i.e. with people using their own variety, then diffusion is said to have taken place (Trudgill, 1986, p. 40).

The resulting new dialect is termed koiné, which is defined by Siegel (1985, p. 363) as

the stabilized result of mixing of linguistic subsystems such as regional or literary dialects. It usually serves as a lingua franca among speakers of the different contributing varieties and is characterized by a mixture of features of these varieties.

Siegel (1985, p. 363) differentiates between two types of koinés. The first is regional koiné, which results from contact between speakers of different regional varieties of the same language. The second is immigrant koiné, which is the outcome of the migration of speakers of different regional varieties to a new location where koiné becomes the primary source of interaction.

A question that may arise relates to why certain variables are more susceptible to linguistic modification processes than others. It has been argued that speakers tend to change markers because of the increased amount of awareness associated with them. According to Trudgill (1974b, p. 103, 1986, p. 11), markers gain saliency for a variety of reasons. They may be overtly stigmatised by members of the speech community or subject to overt corrective pressures. They may also be undergoing linguistic change. Increased awareness is also commonly attached to variables whose variants are entirely phonetically different. Variables involved in maintaining phonological contrasts also become dominant in the awareness of speakers. Auer et al. (2005, p. 44) add that variables which have prestigious variants that are represented orthographically gain a form of saliency. Nonetheless,

they (2005, p. 44) also state that saliency can also sometimes be used to explain non-accommodation. This may be explained in terms of social evaluations. In this regard, Labov (1972a, p. 314) classifies variables into indicators, markers, and stereotypes. Indicators reflect geographical and social stratifications, but do not involve stylistic shifting due to reduced evaluative forces. Markers exhibit geographical, social and stylistic stratifications. Stereotypes are overtly stigmatised. They lie above the level of consciousness of speakers and are commonly associated with geographical, and sociostylistic differentiations.

In examining the question of why change spreads faster in certain varieties, both social and geographical factors contribute to determining the amount and extent of linguistic diffusion across speech communities. From a social perspective, Milroy & Milroy (1985) found linguistic innovations to be transmitted by individuals who have weak social ties (see section 4.3.3). They suggest that the same process applies at a macro-level, with diffusion of linguistic change being accelerated in speech communities whose members are highly mobile and engaged in weak social ties. Details on the geographical aspects will be given below.

The geographer Hägerstrand (1952) implemented the gravity model, a concept originally taken from physics, to help acquire an understanding of the geographical stages of the spread of technological innovations. According to his model, the degree of spatial diffusion relies on both the amount of distance between two locations and the density of their populations. Trudgill

(1974a) applied the gravity model to linguistic data taken from East Anglia, England and Brunlanes, Norway. He noticed that the lack of differentiation between /f/ and /θ/, as well as between /v/ and /ð/, which are characteristic of London speech have spread among young speakers in Norwich. Trudgill found the original gravity model to be incapable of explaining why the influence of London speech on Norwich is 13 times greater than that of Birmingham, which is the second largest city in the UK. He attributed this to linguistic similarities between the two varieties of English, which facilitated the adjustments of Norwich English to London English. He thus modified the gravity model to include a new variable, which is *prior existing linguistic similarity*. He then examined the (h) variable in Norfolk villages, i.e. rural East Anglia. Trudgill noticed that while h-less pronunciation has diffused from London to Norwich, Norfolk villages still maintain h-pronunciation, which is an earlier form of Norwich speech. This opposes the original model, which predicts London, a city that is both larger and more populated than Norwich, to have a greater influence on East Anglia villages than Norwich. On the basis of this, Trudgill suggested considering another variable, namely *relative strength of influence of different centres*. He later applied the modified model to Norwegian data. He looked into the spread of open (æ) in five cities in Brunlanes, located on the south coast of Norway, at two different points in time. In the earlier stage, he found the spread of innovation to take the following direction: Larvik (north eastern corner of Brunlanes) → Stavern (south eastern corner) → Nevlunghamn (south western corner) → Helgeroa (north western corner) → Foldvik (central conservative area). This hierarchy fits neatly with the modified model. Nonetheless, later findings have shown

that Nevlunghamn, which used to be an important sea port, has moved down the scale, whereas Helgeroa, which later improved its road access to other cities, has managed to move up the scale. These kinds of linguistic changes are attributed to changes in the most common means of transport, which have shifted from sea to land. This strongly suggests that the original model should be updated to consider popular modes of transport in the calculation of land and sea distance.

In summary, this section has shown that when speakers of different dialects interact, especially when they have shared positive attitudes, short term accommodation and convergence processes will take place. These involve levelling and simplification of saliently marked linguistic features. When there are frequent face-to face interactions between two speech communities due to spatial proximity and to an increased amount of mobility of one of the groups, more accommodation processes will typically occur and the opportunities for mobile speakers to carry the new linguistic features to their own dialects will increase. This will lead to the spread of innovative linguistic features to other geographical areas. These kinds of diffusion processes will mostly be carried by adults. Once adults transmit linguistic innovations to subsequent generations, stabilisation and incrementation processes may appear. Opposite cases of non-accommodation and linguistic divergence may follow, especially where social or geographical disengagements are found.

Chapter 5 Research methods

5.1 Introduction

The present chapter deals with the research questions posed in this study and the selection of the methods or techniques used to answer them. Research methods refer to “all those methods which are used by the researcher during the course of studying his research problem” (Kumar, 2008, p. 4). Within this section, the research methods will be handled in relation to data collection (e.g. sample, the researcher etc.), and statistical analysis, including statistical modelling, transcription and the coding of data.

5.1.1 Data collection

In quantitative sociolinguistic research, reliable results are based on the design and application of a well-structured methodology. To achieve this, two methodological issues need to be addressed: delimiting a representative sample, and obtaining naturally occurring data. This section presents the chosen sampling procedure and the data collection techniques. In addition, a discussion will be provided of some salient ethical issues.

5.1.1.1 The sample

The success of a sociolinguistic study depends to a large extent on the way in which the sample it uses is representative of the wider speech community. In order to achieve a representative sample, researchers need to avoid bias, and ensure the inclusion of a wide range of subjects (cf. Milroy & Gordon, 2003).

Within the field of sociolinguistics, two sampling strategies have most commonly been used: random sampling and judgement/quota sampling.

The criterion on which random sampling is based on is “that everyone in the population has an equal chance of being selected to form part of the sample” (Llamas, 2006, p. 13). In order to randomly select the participants, a sample frame such as electoral registers or telephone directories is used. Through the use of these kinds of lists, a researcher mechanically selects every n th person. This strategy has been drawn from sociological research and was implemented by Labov (1966b) in his New York study. Ever since, a great deal of criticism has been levelled at the random sampling approach. To start with, not all selected participants are easily accessible (Milroy & Gordon, 2003). Furthermore, the sample frame itself may not include all the members of the speech community. Perhaps more importantly, this approach makes researchers interview complete strangers. According to Tagliamonte (2006), the lack of prior familiarity or rapport with speakers prevents researchers from being able to “tap the vernacular”, as expressed by Sankoff (1988a, p. 175). For the aforementioned reasons, random sampling has been considered “unmanageable and unnecessary in sociolinguistic research” (Chambers, 2009, p. 45). The second major approach, judgement sampling, involves using prior knowledge of the social variables to define the types of speakers needed for the study. In judgement sampling, speakers that could fill certain quotas are selected according to specific criteria (Llamas, 2006). Milroy and Gordon (2003, p. 30) stress that “a good quota/judgement sample needs to be based on some kind of defensible theoretical framework.”. This framework is often

extralinguistic, e.g. sociological, demographic etc. (Tagliamonte, 2006, pp. 24–32). To be confident of the rationality of his/her judgements, the researcher must rely on rigorous background knowledge of the society being investigated, which should be supplemented by reference to existing literature.

According to Tagliamonte (2006, p. 6), quota or judgement sampling benefits from the ethnographic approach that requires the researcher to immerse him/herself in the society being investigated to be both “an observer and a participant”. In filling the quota, the researcher can adopt the ‘snowball’ technique, enabling him/her to gain access to the social network via ‘friend of a friend’ connections (L. Milroy, 1980). This is to the advantage of the researcher, as it will facilitate access to participants and further help in building up an atmosphere of familiarity, rapport and trust. In the context of sociolinguistics, the hope is that this will ultimately induce casual and everyday speech.

In light of the criticisms associated with random sampling and the advantages associated with judgement sampling, Milroy & Gordon (2003, p. 30) state that “variationist studies have... abandoned formal random sampling procedures in favour of quota sampling” (p. 30). Therefore, the present research implements the judgement sampling approach.

I was born and raised in al-ʿAḥsāʾ and have therefore relied on my background knowledge of the speech community and existing literature to select the quotas. In an attempt to avoid irrelevant outside effects, attempts

have been made to include a homogeneous group of sedentary male and female Sunni and Shiite participants aged 15–90, all of whom were born and raised in al-ʿAḥsāʾ, and more particularly in al-Hufūf and al-Mubarrāz. The reason for the exclusion of Bedouins and village inhabitants from the study is twofold. First, the lack of previous literature on the varieties spoken by these two groups and the limitations of my anecdotal experience of their speech have made me unable to predict with any confidence whether they would form either a homogenous or a heterogeneous group with sedentary dwellers of al-Hufūf and al-Mubarrāz. Second, the possibility of Bedouins and village inhabitants forming a heterogeneous group with the sedentary inhabitants of al-Hufūf and al-Mubarrāz, would require the inclusion of other factors into the study, such as Bedouin/sedentary or settlement, which would then require including more participants. Unfortunately, a study of such scope is beyond the time constraints inherent in an investigation of this type. The social factors investigated here are socio-sectarian affiliation, age/education, and gender. The underlying rationale for the selection of sectarian affiliation relates to how such an overt demographic split is stereotypically associated with linguistic variation among the speakers of this dialect. As to gender, age, and education, these are classic social factors commonly investigated in sociolinguistic studies. For more details on other potential social factors that were eliminated from the study, see section 5.1.2.1.

The target quota originally consisted of 12 cells, which represented male and female Sunni and Shiite adolescent & young (15-25), middle-aged (26-45), and elderly (46 and up) speakers. Over a period of six months (June–

December 2012), I was able to collect interviews with 89 speakers. The number of participants in each cell was originally 7–8. Nonetheless, the removal of categorical speakers, i.e. speakers who show no linguistic variation (see section 5.1.2.1), and the manipulation of levels within groups, i.e. either by splitting or conflating them for reasons to be explained in the relevant chapters, caused the number of participants to either decrease or increase in certain cells. This raises the important issue of how many participants a study of this kind should have and what is considered to be the minimum number of tokens that need to be available in each cell. According to Tagliamonte (2006, p. 31), although some statisticians recommend five or three speakers per cell, theoretically any number above one would be adequate. In relation to the present study, despite the removal of categorical speakers, all cells retained a sufficient remaining number of participants of all the variables, i.e. more than two speakers in each cell. As to the number of tokens per cell, Tagliamonte (2012, p. 136) cites a number of researchers who suggest having at least 30 tokens per cell. The number of tokens per cell for all the variables investigated in the present study has far exceeded the 30 tokens level.

5.1.1.2 The researcher

The status of the researcher as a life-long member of the speech community being investigated, i.e. an insider, can facilitate access to participants and increase chances of familiarity with them. Insiders are less likely than outsiders to alter or influence the naturalness of participants' speech. However, characteristics that are peculiar to a certain community may be

obscured and appear normal to a member of the same community. Outsider researchers may have a better chance than insiders of identifying linguistic and social characteristics that are different from their own. Nonetheless, insider researchers may still benefit from their status in the community, while simultaneously attempting to maintain a reflective analytical distance from the subject under study (cf. Janet Holmes, 2008; Levon, 2013).

Being a Sunni speaker from al-'Aḥsā', my initial plan was to have an insider Shiite female assistant to conduct interviews with Shiite speakers. She had to be female because one of the variables – the 2nd person singular feminine possessive/object suffix – requires a female interlocutor. In the event, it was not possible to find an assistant willing to conduct interviews with a large number of speakers, let alone make interviews with males who are not members of her immediate family. This was undoubtedly more difficult due to the conservative nature of the society under investigation, which does not readily allow for extended interactions to take place between males and females who are not close relatives unless for achieving a specific purpose, e.g. shopping, or going to the doctor, that should be done in public or with the accompaniment of another female. As such, I ultimately decided to conduct as many interviews as possible myself, and to seek assistance only where it was not possible for me to gain access to certain speakers.

As stated in the previous section, a total of 89 participants were interviewed. I was able to conduct interviews with 62 speakers. The remainder were conducted by assistants. I attempted to find assistants by

‘word of mouth’ and by placing ads in local blogs, however this was unsuccessful. I therefore had to find another way to recruit them. At the end of their interviews, participants were invited to conduct interviews with their relatives. Some agreed to do so. This method of recruitment was preferred, as these individuals already had a preliminary grasp of the proceedings of the interview, having experienced it first-hand. On the occasions that participants agreed, I scheduled another meeting to give them some guidelines on how to conduct interviews and use the audio recorder. The majority of assistants grasped the instructions easily, although very few others did not. In the latter cases, I had a second meeting with them to explain what was missing and asked them to do supplementary interviews with the same speakers. Ten assistants, made up of one female Shiite and nine female Sunnis, carried out interviews with twenty seven participants. All the Sunni female participants in the study, and most of the Shiite female participants, made up of thirty eight participants, were interviewed by me. I was not able to gain access to elderly Shiite females, except for one lady who was a cleaner at a school, and as such asked a Shiite female assistant to do four interviews with her elderly female relatives. I conducted interviews with most of the Shiite male participants, i.e. fifteen participants. However, I was again unable to gain access to the remaining participants, and as such asked the same Shiite female assistant to conduct six more interviews with her male relatives. I faced difficulties conducting interviews with Sunni male participants and was able to conduct only nine interviews in total with members of this cohort. Because of this, I had to ask several assistants, as no one assistant agreed to do all of the interviews, to conduct interviews with one or two of their male relatives. The

volunteers were able to carry out interviews with seventeen Sunni male participants.

The use of assistants may raise problems related to uniformity of input. Additionally, it has been noted that having interviewers with characteristics different from participants, especially in terms of ethnic background, may affect the interviews (Rickford & McNair-Knox, 1993). In this regard, it is important to note that the researcher, my assistants, and participants all belong to the same broad background, being Saudi Arabs from al-ʿAḥsāʾ. The most prominent difference between the individuals involved is socio-sectarian background. During data collection, the socio-sectarian affiliation of the interviewer, i.e. Sunni, was consistent across the majority of interviews. However, this led to several cases where the socio-sectarian affiliation background of the researcher and the interviewers differed. In an attempt to overcome this difficulty, a Shiite assistant was asked to conduct interviews with Shiites wherever possible. It might be argued that the membership to a different socio-sectarian background than Shiites may have had an impact on their speech during interviews. Concerning this, and as cited by Chand (2009, pp. 61–62), previous findings obtained by Cukor-Avila & Bailey (2001) have demonstrated that the degree of familiarity with participants, the amount of time spent in the community, and the use of peer groups can override the influence of the researcher’s ethnic background. In relation to the present study, and as stated earlier, I already belong to the same background of speakers and am a confirmed member of the speech community, having lived my whole life in al-ʿAḥsāʾ. Generally, Sunnis and Shiites mix greatly. Hence,

it is not only normal for me to talk to Shiites, but more importantly, it is not strange for Shiites to talk to me as a Sunni speaker. In addition, as will be seen in section 5.1.1.3, most of the interviews consist of pairs or groups of subjects. This was arranged with the intention of lessening the influence of the ‘observer’s paradox’ (Labov, 1972a) (also see section 5.1.1.3 below). As for assistants, they conducted interviews with close family members that belong to the same socio-sectarian background. Therefore, they are very familiar with them. Differences in age and gender between interviewers and participants are additional characteristics that may influence the way participants speak, but it is not very practical or even possible to have assistants matching the age and gender of each and every interviewee. Nonetheless, the age and gender were almost uniform across the interviews, as my assistants and I were all middle-aged females,⁹ aged 26–31. As mentioned earlier, the interviewer had to be female in order to elicit the 2nd person feminine possessive/object pronoun.

5.1.1.3 The techniques

The objective of variationist methodology is to capture the ‘vernacular’, i.e. informal spontaneous relaxed speech (Tagliamonte, 2006). This is because the vernacular “provides the most systematic data for linguistic analysis” (Labov, 1984, p. 29). The most common data collection technique for gaining access to the vernacular is the sociolinguistic interview (Ammon et al., 2005; L. Milroy & Gordon, 2003). This approach is very practical in comparison to more time consuming ethnographic methods, such as participant observation

⁹ For the purpose of this study, the term middle-aged will be used for the age range of 26–45.

(Ammon et al., 2005). Nonetheless, it is not free of limitations. Perhaps the most important of these weaknesses is the ‘observer’s paradox’ which describes the challenge that ‘‘the aim of linguistic research in the community must be to find out how people talk when they are not being systematically observed; yet we can only obtain this data by systematic observation’’ (Labov, 1972a, p. 209). To resolve such a discrepancy, researchers have tried to develop means for mitigating the effects of the ‘observer’s paradox’. One way is to use the ‘friend of a friend’ or ‘snowball’ technique (Milroy, 1978, 1987) (see section 5.1.1.1). This technique is drawn from ethnography. Through this technique, the researcher approaches the participants as a friend rather than as a complete stranger. The researcher then asks for an introduction from the participant to other friends in a cumulative process (Tagliamonte, 2006). It is meant to place the researcher somewhere in the middle of the insider and outsider continuum (Milroy, 1987). The ‘friend of a friend’ method should enable the researcher to be both a part of the community being investigated and an observer. In the present study, this method was very helpful in recruiting participants. As a member of the speech community, I was able to interview speakers who belong to my ‘first-order network’ (Milroy, 1987, p. 53), i.e. those with whom I have strong social ties, such as friends, neighbours, or members of the extended family. It was easy for me to enter their homes or invite them to my home compared to other speakers. Through these speakers I was able to extend the range of my social network and include speakers belonging to the second-order zone, i.e. friends of friends. Access to this zone enabled me to find speakers to fill in certain quotas that were not readily available in my immediate social circle.

In some cases, I was able to meet second-order acquaintances in cafes. In other cases, I would contact a friend or a relative and make an appointment to go to their school, university or work. This person would facilitate access to his/her study or work place and make prior arrangements to interview his/her friends who already work or study there. I had prior acquaintance with many of these individuals. I had to resort to this method because I encountered significant difficulties getting potential participants to commit to the interviews and in many cases was not able to do so, as many participants felt no obligation and would accordingly not make the effort to go anywhere or invite anyone to their homes. Meeting these people during their free hours at school, university or work was often more convenient and therefore more successful. In addition, it gave me a chance to more efficiently contact a large group of speakers, amongst which only a few agreed to do the interviews. I anticipated possible shifts in style related to the need to conduct some interviews in educational or vocational settings, as these were likely to feel more formal than a family home. Nonetheless, given that I had prior acquaintance with most participants, that interviews were carried out in breaks, and that the topics raised were casual, I found interviews to actually be very informal. In general, people who agreed to do the interviews were friendly and appeared to speak in a very natural way. During such interviews, there were occasional interruptions of colleagues, co-workers, customers and so forth, but they were often advantageous as they further helped elicit spontaneous everyday speech.

Other means of inducing naturalness in interviews involve manipulating the content of the interview (Becker, 2013). Asking emotional questions such as the ‘danger of death’ question (Labov, 1972a), where participants are asked to describe a near death experience, will tend to draw participants’ attention away from the fact that they are being observed and shift their focus to the content of what they are saying and away from the manner in which they are saying it. This question has been reported to be very successful (Labov, 1984). Nevertheless, it has been found to be unsuccessful with some participants, who may not wish to recollect sad or unpleasant experiences, or who might shift to philosophical or theological language, which is not the goal of the interview (Milroy & Gordon, 2003). In the present study, a milder version of Labov’s ‘danger of death’ question was used: instead, participants were asked to recollect any difficult or negative experience they have been through. With most participants this method proved to be very successful in eliciting natural data as participants were very engaged in describing their experiences. Even so, this line of questioning proved to be somewhat distressing for some participants. In these cases, I dropped the line of enquiry and adopted more cheerful alternatives (see section 5.1.1.4 for a discussion of ethical issues).

Modifying the dynamics of the one-to-one interviews (Milroy & Gordon, 2003) through the use of pair or group sessions has also been advocated to elicit casual speech (Edwards, 1992; Ferguson, 1996; Labov, 1972a). Pair or group sessions are often successful because they allow participants to interact with each other rather than play the role of respondents

(Milroy & Gordon, 2003). Nonetheless, some participants may be underrepresented if others dominate the conversation (Ferguson, 1996; Jabeur, 1987). Therefore, an interviewer needs to carefully observe the course of the interactions and direct attention to any speakers who may be inadequately represented. In the present study, forty-three participants were interviewed in pairs or groups, and forty-six were interviewed individually.

Generally speaking, the appropriate length of interviews differs according to the types of variables investigated. Duration of twenty to thirty minutes is generally sufficient for phonological variables (Milroy & Gordon, 2003). In the present research, where both phonological and morphophonemic variables are investigated, a target was set of 30-60 minutes per speaker. Interviews typically lasted between thirty minutes and two hours. Individual interviews lasted somewhere between thirty and sixty minutes, pair interviews between sixty and ninety minutes, and group interviews between ninety minutes and two hours. An attempt was made to extend the length of individual interviews from thirty to sixty minutes and was able to do so successfully with many participants, but was not able to achieve this with some male participants, who rapidly lost interest.

Interviews were semi-structured. They started with demographic questions regarding participants' age, place of birth, education, marital status, family, friends, and residential, neighbourhood, occupation and language history. Responses to such demographic questions not only helped provide

tokens for the variants, but also served as valuable sources of information for qualitative analysis later on (cf. Milroy & Gordon, 2003).

In addition to demographic questions, the researcher needs to select topics that will “elicit narratives of personal experience” (Labov, 1984, p. 32). These topics can include family, friends, humorous or awkward stories, travel and so forth. Speaking about these kinds of subjects can help draw out the vernacular. In contrast, questions that involve philosophical or political topics should generally be avoided, as these tend to elicit formal ranges of speech (cf. Tagliamonte, 2006). The selected topics should also involve “contrasting attitudes and experiences among various sub-cultures” (Labov, 1984, p. 32). Of interest to the researcher is a focus on questions that involve opinions about linguistic features, e.g. stereotypes, trends, prestigious varieties, or standardness vs. colloquialism. Such questions need to be asked near the end of the interview to avoid drawing participants’ attention to the way they speak. Below is a list of the topics that were implemented in the present research. These topics were not fixed. An attempt was made, however, to select the topics that would be “of greatest interest to the speaker, and allow him or her to lead in defining the topic of conversation” (Labov, 1984, p. 32). Below is a list of some of the topics implemented in the present study:

1. Demographics
2. Family
3. TV programs
4. Your best holiday
5. The pros and cons of hiring expatriate housemaids and drivers
6. Cooking and recipes

7. Humorous or awkward situations
8. Difficult experiences
9. Childhood memories
10. Attitudes towards dialects of al-ʿAḥsāʾ and Najd as well as Modern Standard Arabic

Prior to the interview, participants were informed that the purpose of the study was to gather sociolinguistic information. No further details were given. While conducting the interviews, the interviewers tried to avoid yes/no questions, unnecessarily long triggers, and the assumption of a social position higher than that of the participant. The last point is important, as participants might modify their speech if they feel that they are speaking to someone of a higher status. In fact, “the basic counter-strategy of the sociolinguistic interview is to emphasise the position of the interviewer as a learner, in a position of lower authority than the person he is talking to” (Labov, 1984, p. 40). During interviews, my assistants and I tried to speak naturally and to avoid the use of standard or bookish language (Labov, 1984, pp. 33–34).

One of the problems of the sociolinguistic interview relates to its occasional inability to produce sufficient tokens of certain variables (Alessa, 2008; Taqi, 2010). This is true especially with some variables that are bound to certain phonological environments, or ‘phonolexicalised’ sets. To overcome this issue, I supplemented the semi-structured social interview with a picture elicitation task for the variables which were found to occur, as anticipated, in phonolexicalised sets. The variables in question are the voiced velar plosive (g) and the voiceless velar stop (k). I used 14 pictures (see Appendix A) to elicit around 27 words (for the words to be elicited see Table

1 for the the (g) variable and Table 2 for the (k) variable). Pictures were designed in a way that would help elicit whole sentences that contain the target items. I initially considered including fillers so that participants would not notice what the investigation is about. However, given that the time allotted for the picture elicitation task was 5–10 minutes within interviews averaged to last for 30 minutes per speaker and given that there were already 20 pictures assigned for eliciting words containing the (k) and (g) variables, it was not possible to add more pictures because they would require more time and risk making participants lose interest. Pictures were instead randomised in the sense that they were not separated into two groups for one variable; instead, words containing the (k) and (g) variables were alternated and sometimes conjoined in certain pictures. In spite of this, some participants did notice the recurrence of these variables in words. As such, style was considered as a factor in the analysis of these variables (see section 5.1.2.3 for more information).

Table 1 Words with the (g) variable

<i>gid(i)r</i>	‘pot’
<i>gidām</i>	‘in front of’
<i>birīg</i>	‘jug’
<i>ḥalg</i>	‘a throat’
<i>ḥlūg</i>	‘throats’
<i>ṭirīg</i>	‘way’
<i>gibla</i>	‘the direction of Makkah’
<i>‘iḏg</i>	‘dates raceme (a bunch of dates)’
<i>‘ḏūg</i>	‘bunches of dates’
<i>‘irg</i>	‘vein’
<i>‘rūg</i>	‘veins’
<i>ḥigīl</i>	‘heavy’
<i>sīgān</i>	‘legs’
<i>ḥarīga</i>	‘fire’

Table 2 Words with the (k) variable

<i>katif</i>	‘shoulder’
<i>kabsa</i>	‘rice meal’
<i>kibīr</i>	‘big’
<i>kīsa</i>	‘bag’
<i>dīk</i>	‘cockerel’
<i>dīyūk</i>	‘cockerels’
<i>smika</i>	‘fish (singular)’
<i>simak</i>	‘fish (collective)’
<i>birka</i>	‘pool’
<i>sikkīn</i>	‘knife’
<i>īlk</i>	‘chewing gum’
<i>īūk</i>	‘pieces of chewing gum’
<i>yabki</i>	‘he is crying’

I also needed to devise means by which to elicit more tokens of the morphophonemic variables, especially where I noticed that participants did not produce sufficient tokens during interviews. For instance, participants were asked at the end of the interview to ask the researcher any questions they wanted. This proved very helpful in eliciting the 2nd person singular feminine possessive/object pronoun (-ik). Also, for the 1st person possessive/object pronoun, participants were asked to speak about their family members.

The sociolinguistic interviews were recorded using a digital audio recorder (Zoom H4N). This recorder is relatively small, light, and easy to use. It has two built-in microphones. In addition, it records directly to either WAV or MP3, which can be saved using a USB, making it very practical to use and store. I recorded using uncompressed WAV files. Given that interviews were

carried out both indoors (e.g. homes, cafes) and outdoors (e.g. public markets), they were subject to different types of noise, including coffee machines, people talking in the background, or children playing nearby. Despite my continuous attempts to find quiet places to conduct interviews, it was sometimes not possible to do so. To deal with this, a Superlux E523/D - X/Y stereo condenser microphone was attached to the audio recorder. It has a low cut switch to reduce ambience noise. The use of this microphone substantially enhanced the quality of the recordings, making it possible to reduce noise while still capturing the voices of speakers with clarity.

5.1.1.4 Ethical issues

Since the proposed research project involves the use of digital recordings of naturally occurring data, it was necessary for the researcher to deal with human subjects. One of the most fundamental aspects of ethical research dealing with humans is related to ‘the principle of informed consent’, which stipulates that subjects must be aware of what their participation entails and must voluntarily agree to take part in the study (cf. Milroy & Gordon, 2003, p. 79). In the present study, participation was entirely voluntary. Subjects confirmed their consent orally. Signing consent sheets was avoided to keep the tone relaxed and informal. At the beginning of interviews, a brief oral explanation was provided of the purpose of the study, so as not to increase the influence of the ‘observer’s paradox’. Informing participants that I would be looking at links between their social attributes and their use of certain variables would have caused them to monitor their usage excessively. Nonetheless, I was aware of an ethical obligation to explicitly state the aims

of the research project, and so ensured that this was done near the end of interviews.

Another major ethical obligation is concerned with the protection of the confidentiality of subjects (Trechter, 2013). This entails ensuring the anonymity of individuals who may be liable to some form of risk if their details were revealed (Deckert, 2011). In this regard, participants were reassured that they would remain anonymous throughout the study. Hence, no identifying information will be provided in the thesis except for some assistants who have agreed to have their names appear in the acknowledgement section. In addition, an attempt was made not to raise any topics that would place participants at any form of risk. I also took special care not to address the taboo subject of sect, although some subjects made marginal remarks about the issue of Sunnis and Shiites when they described their norms of contact and language usage.

I am fully aware of the notion that issues considered as ethical in one community may not be in another (Bower, 2008). As such, I have sought to conform to the ethics of the society under investigation. For instance, I did not try to conduct any interviews in privacy with any male who was not part of my family; neither did I ask female assistants to do so. In addition, participants, especially females, were reassured that their recordings would be kept safely and that they would not be used in public.

The use of the ‘danger of death’ question as a methodological technique to lessen the influence of the ‘observer’s paradox’ is sometimes considered less than ethical (Trechter, 2013) because it unnecessarily exploits the subjects emotionally. Although I tried to lessen the impact of the question on participants by asking them to recollect negative rather than life-threatening experiences, I agree that subjects should not be placed under any form of stress, and will avoid this type of questioning in future studies wherever it is possible to do so.

5.1.2 Data analysis

Having described the process of data collection, a description will now be provided of the way the dependent and independent variables were identified, transcribed, and coded. Following this, the rationale behind the selection of statistical analysis model and software will be explained. Finally, an illustration of how output results should be interpreted will be given.

5.1.2.1 Defining the linguistic variable

Providing an explicit definition of the linguistic variable, as well as reporting values for each instance of its occurrence in its own environment is a crucial step in fulfilling the principle of accountability (Labov, 1972a). According to Tagliamonte (2006), the processes of making decisions on what items to include or exclude from analysis should be stated in advance to ensure that the study is replicable. She states that the variants need to first be identified. Next, the researcher needs to distinguish variable contexts from categorical

ones, i.e. those in which the application value occurs either 0% or 100% of the time. The application value refers to the “the variant of the variable that is realised by the hypothesised rule” (Paolillo, 2002, p. 30). Categorical contexts known as ‘knockouts’ may also be manifested at the level of the individual. Tagliamonte and Baayen (2012, p. 142) state that while we might find data to show a great deal of ‘interindividual’ as well as ‘intraindividual’ variation, many datasets have categorical individuals who do not exhibit any form of variation in relation to the investigated variable. According to Labov (1969, p. 729), categorical contexts should be excluded from analysis because if they were included then

the frequency of the application value would appear much lower than it actually is; a number of important constraints on variability would be obscured, since they would appear to apply to only a small portion of the cases; and the important distinction between variable and categorical behaviour would be lost.

This assertion is supported by Tagliamonte (2006), who states that categorical contexts should be eliminated from analysis simply because they do not involve variation. Paolillo (2002) further supports the elimination of knockouts on grounds that they cause problems for logistic regression algorithms.

Although categorical contexts are usually eliminated from logistic regression analysis, this does not necessarily entail that they should be considered as ‘noise’. Tagliamonte (2006, p. 86) states that invariable contexts can help highlight structural differences. In relation to categorical

individuals, Tagliamonte and Baayen (2012, p. 165) suggest supplementing logistic regression analysis with a conditional inference tree model. Since the primary aim of the present study is to handle variable behaviour, the provision of a quantitative analysis of categorical speakers is considered beyond the scope of this study and is instead recommended as a component of future investigations. In this study, categorical speakers will only be analysed qualitatively, while the remaining data will be analysed through the use of logistic regression (see section 5.1.2.5 for details).

5.1.2.2 The dependent linguistic variables

A dependent variable, also called a *response* (Johnson, 2009), is a linguistic variable that fluctuates according to changes in social categories (cf. Wardhaugh, 2010, p. 420) or linguistic environment. Potential linguistic variables involving variation, possibly indexing social meaning, were chosen over two stages. First, through a comprehensive review of the accounts of dialectologists on the dialect of al-ʿAḥsāʾ consisting mainly of Prochazka’s (1988) description of al-ʿAḥsāʾ Arabic, supplemented by marginal remarks provided by other researchers including al-Tajir (1982), aš-Šubāṭ (1989), Holes (1991), and al-Ḥulaybī (2003). This was supported by reviewing sociolinguistic studies undertaken in Saudi Arabia e.g. Najdī speakers in Jeddah (Alessa, 2008), the Gulf, e.g. Bahrain (al-Qouz, 2009; Holes, 1987), and other Arabic-speaking countries, e.g. Jordan (Abdel-Jawad, 1981; al-Wer, 1991). Additionally, I have relied on my previous anecdotal experience, as a native speaker of al-ʿAḥsāʾ Arabic, to prepare a list of potential linguistic variables. During the second stage, data obtained from interviews was utilised

to refine the list, excluding less prominent variables or adding variants to certain variables. Accordingly, five phonological and morphophonemic variables were chosen for transcription and were coded for quantitative analysis. The phonological and morphophonemic variables and their variants will be discussed briefly in this section, followed by an explanation of the underlying rationale for the choice of these specific linguistic variables. More detailed information regarding previous literature and methodological decisions for each variable will be presented in subsequent chapters, together with their results.

The phonological variables

Three phonological variables are investigated in the present study, namely, (k), (g), and (ɣ). The variability of (k) concerns palatalisation. This occurs in two distinct contexts: either specifically in the 2nd person feminine singular object/possessive suffix (-ik) (Classical Arabic *-(a~u~i)k(i)*), dealt with here as a morphophonemic variable, or in word stems generally, where it is treated as a distinct, phonological variable.

The phonological (k) variable (Chapter 6) has three realisations. It may be realised as a voiceless velar plosive [k], a voiceless palato-alveolar affricate [č] (IPA [tʃ]), or a voiceless palato-alveolar fricative [š] (IPA [ʃ]). The [č] form is represented as the only realisation of /k/ in al-ʿAḥsāʿ Arabic in previous literature (Prochazka, 1988). The incoming (k) realisation matches

Modern Standard Arabic and is assumed to be the supra-local form (cf. Alessa, 2008; al-Rojaie, 2013).

The (g) variable (Chapter 6) has two variants. It may be realised as either a voiced velar plosive [g] or as a voiced palato-alveolar affricate [j] (IPA [ɟ]). Both variants are colloquial, i.e. they do not match the Modern Standard Arabic voiceless uvular stop [q] with which they are cognate. The voiced velar plosive [g] is claimed to be the supra-local variant in Saudi Arabia (cf. al-Rojaie, 2013; Alessa, 2008). However, the [j] variant has been reported as being the local variant of al-ʿAḥsāʾ Arabic (Prochazka, 1988, p. 16).

Previous studies of Arabic dialects suggest that (k) and (g) palatalisation occurs in contiguity with front vowels (al-Qouz, 2009; Holes, 1987; Johnstone, 1963; Taqi, 2010). Within the present study, phonetic environment did not have much influence on the occurrence of word-stem palatalisation, probably because palatalisation was found to be recessive (see section 6.4 for more details). In previous studies, (de)palatalisation of (k) and (g) have had significant associations with geographical location, settlement type (i.e. city vs. village), religious or sectarian denomination, origin of social group, social network, contact, class, type of school, education, age, and gender (cf. Abdel-Jawad, 1981; al-Amadidhi, 1985; al-Muhannadi, 1991; al-Qouz, 2009; al-Rojaie, 2013; al-Wer, 1991; Blanc, 1964; il-Hazmy, 1975).

The (y) variable (as discussed in Chapter 8) has two variants. It may be realised as a voiced velar/uvular fricative [ɣ], which matches Modern Standard Arabic, or a voiceless uvular stop [q]. Variation between [ɣ] and [q] has been attested previously in al-ʿAḥsāʾ Arabic (cf. Prochazka, 1988). Previous findings show that the realisation of (y) as [q], and sometimes as voiced [ɣ], is not phonetically conditioned in Gulf dialects (cf. al-Qouuz, 2009; Holes, 1987; Taqi, 2010). Previous literature demonstrates a state of conflict between standardness and prestige in relation to this variable. In Bahrain, for instance, the [ɣ] and [q] variants are associated with the ruling Sunni group and are thus approximated because of their high status (Holes, 1987). Similarly, in Kuwait, [q] is associated with the prestigious Najdī group and is thus becoming a trend among speakers belonging to the Bedouin ʿAjmi tribe (Taqi, 2010). Nonetheless, in both situations, literacy plays a significant role in advancing the use of [ɣ] (cf. al-Qouuz, 2009; Holes, 1987; Taqi, 2010). In addition, the use of (y) has been found to be influenced by socio-sectarian affiliation, ethnicity, age, and gender (cf. al-Qouuz, 2009; Holes, 1987; Taqi, 2010).

The morphophonemic variables

Two morphophonemic variants are investigated in the present study, namely the 2nd person singular feminine possessive/object suffix (-ik) (Chapter 7) and the 1st person singular possessive/object suffix (-i) (Chapter 9).

In al-ʿAḥsāʿ Arabic, (-ik) may be realised as [-(i)k(i)], [-(a~i)š], or [-(a~i)č]. The [-(i)k(i)] reflex is both the standard and the assumed to be developing supra-local reflex in Saudi Arabia (al-Azraqi, 2007; Alessa, 2008; al-Rojaie, 2013). On the other hand, the [-(a~i)š] and [-(a~i)č] are the local reflexes (Holes, 1991; Prochazka, 1988). The [-(a~i)š] reflex is associated with Shiites; whereas [-(a~i)č] is associated with Sunnis (Holes, 1991). Previous findings show that the use of (-ik) is further linked to other social factors, including gender, age, class, and city (al-Azraqi, 2007; Alessa, 2008; al-Qouz, 2009; al-Rojaie, 2013; Holes, 1991).

In the Arabic dialect of al-ʿAḥsāʿ, the 1st person singular possessive pronoun (-i) may be realised as [-i], [-y], or [-ya]. The 1st person singular object pronoun (-ni) may be realised as [-ni], [-anya], [-nya], or [-ya]. For reasons explained in Chapter 6, in this study, both morphemes are treated as a single variable, namely (-i).

Rationale for selection of linguistic variables

There are several reasons for the selection of the aforementioned specific linguistic variables. One of these factors pertains to the way in which they will help support an understudied variety. As stated in section 1.2., previous literature on al-ʿAḥsāʿ dialect is highly limited. Available sources merely give citations or brief remarks on al-ʿAḥsāʿ Arabic, typically only given as part of broader descriptions or within the context of other varieties (cf. al-Tajir, 1982; Holes, 1991; Prochazka, 1988). As such, the investigation of these linguistic

variables will help uncover and examine certain underexplored aspects of al-ʿAḥsāʾ Arabic. The selection of these linguistic variables is also motivated by a need to address the salient features that distinguish this variety from other closely related dialects, such as the unconditioned use of the [-ya] reflex of the 1st person singular possessive/object pronoun or the use of the specific sets of phonolexicalised items exhibiting word-stem palatalisation of (k) and (g). The process of choosing these linguistic variables is further driven by a need to quantitatively explore variations that have been previously noticed informally. Furthermore, these choices are informed by the fact that this study seeks to contribute meaningfully to the growing body of literature for specific well studied Arabic variables, including (k) (cf. Abdel-Jawad, 1981; Alessa, 2008; al-Qouz, 2009; al-Rojaie, 2013; Herin & al-Wer, 2013; Holes, 1987), (g) (cf. al-Amadidhi, 1985; Alessa, 2008; al-Muhannadi, 1991; al-Qouz, 2009; Holes, 1987; il-Hazmy, 1975), (ɣ) (cf. al-Qouz, 2009; Holes, 1987; Taqi, 2010), and (-ik) (cf. al-Azraqi, 2007; Alessa, 2008; al-Qouz, 2009; al-Rojaie, 2013).

5.1.2.3 The independent factors

An independent variable is a social or linguistic determiner that affects the use of a certain linguistic variable (cf. Wardhaugh, 2010, p. 420), also called a ‘predictor’ (Johnson, 2009). As will be discussed in section 5.1.2.5, the primary statistical model¹⁰ implemented in the present study is the mixed-effects model, although fixed-effects modelling are sometimes used as well.

¹⁰ A statistical model refers to the assumptions underlying data-generating mechanisms (Boland, 2015, p. 210).

Two types of independent factors can influence a response in mixed-effects models, namely fixed effects (groups) and mixed effects (random). Fixed effects are factors that are typically replicable in future studies and which possess a relatively limited number of possible levels, such as gender, which has the levels of male and female. On the other hand, mixed effects are factors with a large number of levels that are not usually replicable, e.g. individual speaker or word. Unlike mixed-effects models, fixed-effects-models enable the investigation of solely fixed-effect predictors. In this section, random as well as fixed-effect predictors will be discussed in relation to the present study.

Random-effect predictors

In the present study, *individual speaker* is the only random-effect factor considered. The researcher is conscious of possible lexical effects (cf. Bybee, 2002, 2007; Labov, 1994). It would have been possible, for instance, to include *word* as a random-effect factor in the analysis. However, this option was declined because contrary to *individual speaker*, the inclusion of *word* would result in the exclusion of a large number of lexical items that occurred only once during interviews. After all, single tokens of lexical items cannot display variation, and the logistic regression analyses used in this study are not well suited for categorical data (as explained in section 5.1.2.1). In addition, most of these single occurrences were found in conversations. If they were excluded, very few tokens would be left to be compared with those

obtained during picture elicitation tasks. As such, the factor of lexical frequency was ruled out from analysis with all variables.

Fixed-effect factors

As to fixed-effect factors, numerous social constraints were initially considered in the analysis. Run altogether they exhibited several interactions (factors not independent of each other), overlaps (badly distributed data), and non-orthogonality (empty cells). Multiple combinations of factors were thus considered. Levels within factors, which initially consisted of as many levels as possible, were sometimes conflated based on linguistic and social justification. At other times, factors were split to avoid interactions. The resulting models were compared with initial models through the use of log likelihoods, degrees of freedom, and chi-square tables (cf. Paolillo, 2002; Tagliamonte, 2006). The model with the best fit of the data was always chosen. Below is a detailed description of all the social and linguistic predictors initially considered in the analysis, with an explanation for the elimination of certain options.

Social factors

A number of social factors were initially considered in the analysis, namely age, occupation, education, socio-sectarian affiliation, neighbourhood, length of stay outside al-³Aḥsā³, and social network. The reasons for the selection of these variables will be explained in detail below. In addition, the specifics of which factors were kept and which were eliminated from analysis will be

provided. All factors which were eventually selected were considered as fixed effects, except for the individual speaker, which was treated as a mixed-effect factor.

Age, occupation and education

Age-stratified patterns of variation could either be caused by change in the speech of the community through time (historical change) or change in the speech of speakers as they grow older (age grading). This distinction presents a predicament for apparent time (synchronic) studies, which examine the relationship between age stratification and linguistic change. Such studies detect and predict linguistic change on the basis of linguistic differences between young and elderly speakers. If a certain linguistic feature is used frequently by young speakers and is missing in the speech of elderly speakers, a change in progress would be presumed to be taking place. Nonetheless, if speakers lose certain linguistic features as they grow older, it is not possible to say definitively, on the sole basis of apparent time findings, that a change is occurring. To be able to eliminate the possibility of age grading and thereby verify change in progress, researchers need to rely on real-time evidence (i.e. both synchronic and diachronic) (Eckert, 1997). Unfortunately, real-time evidence may not always be readily available. It is perhaps for this reason that real-time studies are relatively rare (al-Wer, 2005; L. Milroy & Gordon, 2003). An example of a real-time study is provided by Boberg (2004), who compared his lexical and phonological data on Montreal English with data previously provided by Avis (1954–1956) and Hamilton (1958) on

the same community. Boberg (2004) found strong support for the real-time hypothesis, as his synchronic findings on age patterns matched previous evidence without showing any signs of age-grading. Boberg (2004) found change in progress to include both generational advancement, in addition to what he termed 'late adoption', i.e. post-acquisition of innovative forms that are highly adopted by younger speakers. This was found to be especially applicable with lexical items. However, with the more abstract levels of grammar represented by phonology, elderly speakers displayed an admixture of both adoption and rejection with respect to innovative forms.

Another test of the real-time hypothesis was conducted by Gillian Sankoff & Blondeau (2007), who compared their findings on the change from apical to dorsal /r/ in Montreal French with data collected in 1971 and 1984.¹¹ Gillian Sankoff & Blondeau (2007) found the Montreal French speech community to be undergoing a massive shift towards the use of dorsal [R]. The shift was noted as being particularly abrupt in the form of a substantial increase in the number of categorical users of [R], who were mainly younger speakers. This was unlike the anticipated shift, which was expected to be gradual, i.e. one going through incremental rises of levels across the lifetimes of speakers. Another real-time study was carried out by Trudgill (1988, pp. 40-44), who revisited his (1974b) Norwich study (see section 4.3.3). Trudgill's new findings generally confirmed the trends that he had inferred earlier. Some of the changes he predicted had either progressed, e.g. the

¹¹ As cited by Gillian Sankoff & Blondeau (2007), the 1971 data is taken from the original study conducted by Gillian Sankoff, David Sankoff & Henrietta Cedergren, whereas the 1984 data is taken from a follow up study carried out by Thibault & Vincent.

merger of vowels in pairs like ROAD and RUDE, or turned complete, e.g. lexical sets such as HERE and HAIR turned into total homophones. However, certain linguistic features, that had been reported as being rare, or only produced by few idiosyncratic speakers in the previous data, were found to have undergone a rapid change, e.g. the use of the labiodental approximant as a realisation of /r/.

A further real time study was provided by Blake & Josey (2003), who revisited Labov's (1972a) Martha's Vineyard study (see section 4.3.3). In their study, they noticed a considerable decline in the previously reported high centralisation of /ay/, which was a marker of local identity that was strongly associated with fishing and used as an act of divergence against incoming tourism. They attributed this to a restructuring of the society of Martha's Vineyard island, represented by a substantial decline in the fishing business and a change in local attitudes towards tourism, from rejecting to welcoming.

Although the aforementioned studies show general agreements, some of them also detected minor discrepancies. This suggests that the direction of change is not always straightforward. New trends may arise and reverse the earlier direction of a change. Therefore, while age-stratified linguistic variation findings can detect linguistic change, "they are not hard and fast evidence of it" (al-Wer, 2005, p. 1). In spite of the presence of some slight limitations, apparent-time studies are still considered to be valuable given the extent of faithfulness reported by most of the aforementioned studies. They

are also useful because they can provide expedient results against which future findings may be compared. Having established this, one needs to consider the basis upon which age is stratified.

Classifying participants into different age cohorts can be done in various ways. Eckert (1997) explains that participants can be divided into age groups according to either an 'etic' or an 'emic' approach. In an etic age cohort, arbitrary or numerically based age spans are used, e.g. (10–20), (21–30), (31–40) etc. By contrast, in an emic age approach, participants are grouped according to life stages based on shared external events or experiences, e.g. childhood, adolescence, and adulthood. Eckert (1997) supports the use of life stages because “age correlates with variation by virtue of its social, not its biological status” (p. 152). This is supported by Milroy and Gordon (2003), who state that using numerically based divisions such as decades leads to “an analytical disadvantage” because “age by itself has no explanatory value; it is only when examined in the context of social significance as something reflecting differences in life experiences that it becomes a useful analytical construct.” (p. 39). Thus, age divisions should ideally be based on meaningful social events.

In this study, several age configurations were initially considered. By using several etic age divisions and correlating them with social factors like occupation and education, it was possible to arrive at a meaningful emic-based age division. Initially, age was included as a continuous variable. Though results were significant with the (k), (g) and (-i) variables, it was felt

that the differences between age groups were obscured. The last point was especially true for the (-ik) variable, where age patterns (see Chapter 7) were found not to follow a regular ascending or descending order. Speakers were therefore divided into groups of a decade and half a decade. Models with such age divisions provided a better fit to the data than those with age as a continuous factor. Still, results showed that speakers within one decade, e.g. 20–24 and 25–29, acted differently from one another, while in other cases speakers across decades acted alike, e.g. 30–34, 35–39, and 40–44. It was therefore decided to combine groups that have linguistic similarities and share a mutual social experience, represented at the occupation and education level. The factor group of occupation, which is often used as an indicator of social class (Meyerhoff, 2011) was therefore included in the analysis. Young participants who are still in education are included in the occupation factor as secondary (adolescent) or university (young) students. These students were found to act alike with the (k), (g), (y), and (-i) variables. As such they were conflated into a single category of ‘adolescent & young’. With the (-ik) variable, these groups acted differently and were accordingly treated as separate levels within the age factor. Employees and salespeople aged 26–45 were found to roughly exhibit similar linguistic behaviour with the (k), (g), (y) and (-ik) variables. With these variables, middle-aged was considered as being a separate level within the age factor group. With the (-i) variable, middle-aged speakers resembled adolescent and young speakers and as such were grouped together. Farmers, retirees, and housewives aged 46+ were found to act alike with the (y) and (-ik) variables and were therefore considered as being elderly speakers. With other variables, further

subdivisions were made based on the education level of participants. As can be seen, occupation and age were found to be highly correlated and as such they cannot both be included in the analysis. Since occupation had several forms of non-orthogonality (e.g. there were no young farmers, or elderly students), it was felt that occupation should be excluded from analysis and used only as a social basis for delineating age groups, together with the linguistic behaviour of participants.

Education was also found to interact with age with some variables. When education was initially included in the model, it was composed of a detailed list of levels. It consisted of illiterates, those who could only read the Quran, and those who could read and write. In addition, certificate holders were divided into elementary, intermediate, secondary, diploma, bachelor, and higher degree holders. Education levels were then conflated to three groups: basic education (ranging from illiterates to elementary certificate holders), intermediate education (holders of intermediate or secondary certificates) and advanced education (holders of any certificates beyond secondary school). As speakers in the last two groups displayed similar linguistic behaviour, they were further conflated to be described as educated; while the first group was comparatively considered as non-educated. Cross tabulations of age and education revealed a great deal of non-orthogonality. There were no young or middle-aged speakers who were non-educated. The case was not the same with elderly speakers, who were either educated or non-educated. Linguistic differences between educated and non-educated elderly speakers were considerable with the (k), (g) and (-i) variables and could not be overlooked.

This interaction can be handled through the construction of ‘cross-product’ groups, in which two separate factors are merged into one, through the creation of combinations of levels between the two factors. For instance, instead of having education (educated vs. non-educated) and age (adolescent, young, middle-aged, and elderly) as two separate factors, we can have a cross product factor of education/age that consists of the following levels: educated adolescent, non-educated adolescent, educated young, non-educated young, educated middle-aged, non-educated middle-aged, educated elderly, and non-educated elderly. Given that this study found no adolescent, young, or middle-aged speakers who are non-educated, we can eliminate their levels and have a reduced cross product of age/education consisting of only adolescent, young, middle-aged, educated elderly, and non-educated elderly. Through the comparison of models, by which models having only age as a factor compared against models with age/education split, the age/education models proved to yield a better fit to the data. Hence, the reduced cross product of age/education was included in the analysis of (k), (g) and (-i). With regards to the other variables, such as (-ik) and (γ), model comparisons showed that models with age only provide a better fit to the data than the models with the age and education split.

Socio-sectarian affiliation and neighbourhood

On the basis of previous literature, which suggests associations between socio-sectarian affiliation and linguistic choice (cf. al-Qouz, 2009; Holes, 1987), supplemented by the researcher’s knowledge about linguistic

stereotypes attached to Sunnis and Shiites which was derived from being a member of al-ʿAḥsāʾ society, the factor of socio-sectarian affiliation was considered in the analysis. In the sample, socio-sectarian affiliation was found to be largely correlated with neighbourhood. Participants were asked during interviews to report all the neighbourhoods they lived in since childhood. As a result of this, the following generalisations were reached.

In the near past, there were a few small neighbourhoods in close proximity to each other, e.g. al-Kūt, an-Naʿāṭil, and ar-Rifʿa in al-Hufūf, and as-Syāsib, al-Mjābil, aš-Šiʿba al-Qadīma in al-Mubarrāz. Sunnis and Shiites used to live in relatively separate sections within the same neighbourhoods. Nowadays, especially in al-Hufūf, a large proportion of Sunnis have moved out of these old neighbourhoods to new adjoining neighbourhoods, e.g. al-Xālidiyya, al-Muṭallaṭ, and al-Mazrūʿ. Many old neighbourhoods are now primarily inhabited by Shiites, e.g. ar-Rifʿa in al-Hufūf and al-Mjābil in al-Mubarrāz. Like Sunnis, some Shiites also moved into their own new neighbourhoods, such as Ḥayy al-Malik Fahd (al-Maḥdūd) in al-Hufūf and al-Xars in al-Mubarrāz. With urban expansion, the main areas of settlement of Sunnis and Shiites have moved further apart from each other, making neighbourhoods increasingly strongly tied to socio-sectarian affiliation. As this socio-sectarian affiliation was found to interact strongly with neighbourhood, a decision was made against the inclusion of neighbourhood in the analysis.

In examining the relationship between Sunnis and Shiites, it was possible to follow an alternative method and consider neighbourhood rather than socio-sectarian affiliation as a factor. However, this approach was rejected for the following reasons. First, anecdotal experience of the nature of al-ʿAḥsāʾ society shows that sect plays a more fundamental role than neighbourhood in defining social ties. In fact, and as supported by the answers given by participants to the demographic questions posed during interviews, the clustering of groups in neighbourhoods is highly dictated by sect, and not the other way around. This is supported by the answers obtained from questions on network ties (discussed later in 5.1.2.3. section), which clearly demonstrate that family ties within the same socio-sectarian affiliation play a more crucial role in social interactions than neighbourhood. Additionally, it is very possible for individuals to have neighbours with whom they do not interact at all. This is not to say that neighbourhood is an irrelevant factor, however it is certainly not superior to socio-sectarian affiliation in the examination of sociolinguistic variation in the dialect of al-ʿAḥsāʾ.

Gender

Gender is one of the classic social variables commonly investigated in Arabic variation studies. Since the 1980s, the term ‘sex’ has almost been abandoned in favour of the term ‘gender’ in sociolinguistic research (al-Wer, 2005). The term ‘gender’ has been found to provide a more accurate description of the differences between men and women. As Chambers (2009) explains, the term

‘sex’ entails only the biological differences between men and women, whereas the term ‘gender’, though in part based on biology, entails the different sociocultural roles they fill. As such, gender differences are not solely biologically determined. On a general basis, many sociolinguistic studies show that women are more innovative and more attached to standardness and prestige than men (J. Holmes, 1997; Labov, 2006; Trudgill, 1985; W. Wolfram, 1969; W. Wolfram & Fasold, 1974). Cross tabulations of this factor and other factors did not reveal any strong interactions. As such, gender was included in the analysis as an independent social factor.

Length of stay outside al-ʿAḥsāʾ

Initially, it was intended that the participants selected would not have spent extended periods of time outside al-ʿAḥsāʾ. Nonetheless, many participants reported living outside al-ʿAḥsāʾ for periods of time for study, work and so forth. It became apparent that this was part of the nature of the al-ʿAḥsāʾ community. Ruling out these speakers would necessarily mean ruling out their influence on the dialect. Hence, speakers who spent time outside al-ʿAḥsāʾ were included in the study. The factor of length of stay outside al-ʿAḥsāʾ was initially considered in the analysis. It consisted of a detailed description of the number of months or years spent outside. These were then conflated into three groups: those who had not lived outside, those who had spent a relatively short period of time (1–5 years), and those who had spent 6 years and above outside al-ʿAḥsāʾ. Again, a great deal of non-orthogonality was found, even when the first two groups were conflated. As such, this

factor was eliminated from analysis. Nonetheless, two observations may be made regarding this factor. First, most speakers in the sample, particularly Sunnis and male Shiites, had spent 1–5 years outside al-ʿAḥsāʾ. Second, no Shiite females in the sample, of any age and education level, had spent any extended periods of time outside al-ʿAḥsāʾ. This suggests that Sunnis and male Shiites have a far better chance than Shiite females to engage in contact with speakers from other areas in Saudi Arabia. However, it should be noted that time spent outside al-ʿAḥsāʾ does not necessarily indicate that speakers have actually engaged in communication with individuals from other areas. The findings of this study (see sections 6.4 and 7.4) support this assumption. Although Sunnis surpass Shiites in the use of supra-local features, e.g. [k], [g], and [-(i)k(i)], Sunni females show a higher use of supra-local features than their male counterparts, even though both spent some time outside al-ʿAḥsāʾ. Among Shiites, females were again found to be more engaged in change towards the supra-local [k], [g], and [-(i)k(i)] forms than males, despite the men having spent time outside al-ʿAḥsāʾ and the women not.

Social network

The concept of social network has been widely studied in sociolinguistics. It is based on the assumption that close-knit ties help maintain highly localised norms, whereas weak social ties facilitate linguistic change (J. Milroy & Milroy, 1985; L. Milroy, 1980). In this study, a network strength score was given to participants according to how they answered the following questions:

- Do you have any neighbours who are also relatives?

- Do you work or study with a relative who lives in the same neighbourhood?
- Do you meet regularly with him/her outside school/university/work?

Participants were given scores from 1 to 3 according to how they answered the questions, with 3 being the highest score of network strength. Participants were also asked to answer the following open question:

- With whom do you regularly socialise?

This qualitative question was intended to help understand the nature of social ties in this specific community. At first, the factor of social network was included in the analysis. However, results were found to be insignificant across all variables. Nevertheless, the use of the qualitative question helped with inferring some characteristics of the types of social ties in al-'Aḥsā'. For instance, it was observed that social relations in al-'Aḥsā' are primarily based on kinship ties. Typically, people in al-'Aḥsā' spend their weekdays at work, home, school, or university. Weekends, on the other hand, are mostly spent at their grandparents' houses. Special occasions, such as Eids or wedding ceremonies, are also dominated by family relations. Such strong social ties are expected to contribute to the preservation of local linguistic features, as opposed to the adoption of supra-local norms. This would be true especially if al-'Aḥsā' society was compared to other societies in Saudi Arabia, who may not maintain the same strong social ties found in al-'Aḥsā'.

An understanding of the way social ties correspond to the socio-sectarian, age, and gender attributes of participants may also provide insights into some

of the underlying reasons for certain linguistic choices. For instance, elderly men of high social status tend to open their houses to visitors on a daily or weekly basis. Most of their visitors are relatives, although some are neighbours or friends. This provides some rationale behind their preservation of local linguistic features. Younger males, on the other hand, are of two types: those who like to meet with their friends, relatives, colleagues, and neighbours after work or study; and those who like to spend their time with close family at home. This gives a general indication that some younger males have a better chance than elderly males of maintaining open social networks, and are therefore more likely to adopt non-local forms. With respect to females, different social ties were found between Sunnis and Shiites. Shiites self-reported a very domestic life style, though some elderly females reported opening their houses from time to time to neighbours and relatives. Sunni females, on the other hand, reported a more open social network. This goes some way to explaining why female Sunnis tend to display supra-local linguistic features more than female Shiites.

Given that Sunnis and Shiites carry out endogamous marital relations, that they tend to live in predominantly separate neighbourhoods, and that most of their social relations are based on kinship ties, the consequence was that strong social relations between Sunnis and Shiites in such contexts tend to be rather limited. Nonetheless, Sunnis and Shiites interact with each other via numerous other channels, such as work, education, shops, or through friendship.

Since the factor of social network was found to be insignificant across all variables, and given that qualitative answers show a marked dominance of kinship ties over other types of relationships (e.g. friends and colleagues), it is better not to copy a framework and exert it on al-ʿAḥsāʾ society. This is because other frameworks may be designed for successful application in societies whose members are not as highly engaged in extended families or tribes similar to those found in al-ʿAḥsāʾ.

Table 3 illustrates the framework for factors, levels within them, and the number of speakers in each level as initially considered in the present study.

Table 3 Social factor groups

Factors	Levels	Illustration	#Speakers
Speaker	Individual		89
Socio-sectarian affiliation	Sunni		48
	Shiite		41
Gender	Male		47
	Female		42
Education	Basic	Illiterate, could read Quran, primary school	14
	Intermediate	Intermediate or secondary school	32
	Advanced	Educated beyond secondary school e.g. diploma, bachelor	43
	Non-educated	Illiterate, could read Quran, primary school	14
	Educated	Educated beyond intermediate school	65
Age by decade	8	81–90	1
	7	71–80	6
	6	61–70	1
	5	51–60	11
	4	41–50	16
	3	31–40	9
	2	21–30	17
	1	15–20	28
Age	Elderly	46+	27
	Middle-aged	26–45	21
	Young adult	20–25	19
	Adolescent	15–19	22

Table 3 Social factor groups (continued)

Age/education2	Non-educated/ elderly	Illiterate, could read Quran, primary school/age 46 +	14
	Educated/elderly	Educated beyond primary school/age 46 +	13
	Middle-aged	26–45	21
	Young adult	20–25	19
	Adolescent	15–19	22
Age/education3	Non-educated/ elderly	Illiterate, could read Quran, primary school/age 46 +	14
	Educated/elderly	Educated beyond primary school/age 46 +	13
	Middle-aged	26–45	21
	Young adults & adolescents	15–25	41
Occupation	Retired		2
	Housewives		8
	Farmer		3
	Salesperson		7
	Employee	Either at private sector or in government	28
	Student	Secondary and bachelor	41

Table 3 Social factor groups (continued)

Social network	Weak	At least two relatives are neighbours	19
	Middle	At least two relatives are both co-workers and neighbours	30
	Strong	At least two relative who are co-workers and neighbours are socialised with regularly	40
Length of stay outside al-'Aḥsā'	None	Did not spend any time beyond a year outside al-'Aḥsā'	66
	Short	Spent 1-5 years outside al-'Aḥsā'	14
	Long	Spent more than 6 years outside al-'Aḥsā'	9

Linguistic factors

Linguistic constraints were not quantitatively considered with the (-ik) and (-i) variables. The (-ik) variable is considered to be unconditioned because contiguity with front vowels, which is the linguistic constraint perpetuating /k/ palatalization (cf. Holes, 1987, p. xviii; il-Hazmy, 1975, p. 60; Johnstone, 1963, p. 210, 1967, p. 2), is almost always present within the morphophoneme, with very few exceptions (see section 7.3.1.). Like other variables, the linguistic context of the (-i) variable is discussed qualitatively in section 9.3.1. Although this variable would be expected to be under the influence of some linguistic constraints, no such restrictions were apparent. Perhaps with the inclusion of more tokens, further subdivisions could be carried out within this variable in order to enable effective exploration of any

potential complexities. It should be said here that the use of the [-ya] variant in the dialect of al-ʿAḥsāʾ is considered unconditioned, unlike other languages or dialects. This is because it can be used as a 1st person singular possessive and object pronoun both post-consonantly and post-vocalically (see section 9.2.1.).

The influence of linguistic constraints was considered with the phonological variables (k), (g), and (y). This section offers some brief remarks on the logic behind the selection of the linguistic constraints, as well as their division into discrete levels. The discussion will be confined to those factors that were initially considered in the statistical analysis. Some of these factors were eventually eliminated from analysis for reasons to be explained in the pertinent sections below. General factors related to lexical effects will be discussed first. This will be followed by factors that are specifically related to either (k) and (g) or (y).

General linguistic factors

This section deals with one factor involving lexical effects, namely *frequency*. As will be discussed below, although this factor was initially considered, it was not included in the final analysis.

Frequency

During the early stages of this research, attempts were made to include *frequency* as a linguistic factor. Nonetheless, a decision was made against that

inclusion for a number of reasons. Insufficient frequency data were available for Saudi or Gulf dialect against which the lexical items found in the corpus¹² could be compared. The corpus itself could also not reliably be used to construct a frequency list, for the following reasons. With the (k) and (g) variables, the majority of the tokens were produced through picture elicitation tasks, resulting in a much higher frequency of occurrence than would normally be expected. With other variables, the repetition of topics across interviews has caused some lexical items to be highly frequent. For instance, with the (ɣ) variable, the word *šayyāla* ‘house made’ was highly frequent because one of topics was about hiring housemaids. Similar effects were observed with other variables. As such, the present corpus is not a suitable guide to frequency.

Variable-specific linguistic factors

This section will discuss factors that are specific to either (k) and (g) or (ɣ). It should be noted that (k) and (g) variables are grouped together here, because they involve the same phonological process, (de)palatalisation. Two factors are discussed in relation to these variables, style and phonetic environment. In the case of (ɣ), however, only position in word is considered. All of these factors were eventually considered in the final analysis. For more comprehensive details on the linguistic constraints of these variables, see sections 6.2.2 and 8.2.2.

¹² The term ‘corpus’ will be used in this study to refer to the data collected during interviews (see section 5.1.1.3 for more information on data collection techniques).

The (k) and (g) variables

Table 4 shows the linguistic factor groups considered for the (k) and (g) variables. Initially, phonetic environment, and style were considered in the analysis.

Table 4 Linguistic factor groups for word-stem (k) and (g)

Factor group	Levels	Example
Phonetic environment	High front environment	<i>čišum</i> ‘their bag’ <i>firġj</i> ‘neighbourhood’
	Elsewhere	<i>č‘āba</i> ‘sheep ankles’ <i>m‘arġja</i> ‘veiny’
Style	Conversation	
	Picture elicitation	

Phonetic environment

Previous research has shown that (k) and (g) (< Classical Arabic /q/) palatalisation tends to occur in contiguity with short and long front vowels (Holes, 1987; il-Hazmy, 1975; Johnstone, 1963, 1967). More recent findings suggest that palatalisation is specifically influenced by high front environment (al-Rojaie, 2013; Mustafawi, 2006; Mustafawi, 2005). In many Arabic dialects the short and long low vowels have both front and back allophones, however in al-‘Aḥsā’ Arabic low front vowels are considerably rarer. As such, high front vowels were chosen for analysis. Initially, two configurations were considered: (preceding high front vowel, following high front vowel, and

elsewhere), and (high front environment, and elsewhere). Both factors proved to be non-significant. However, the latter was chosen for the final analysis, because it coincides with previous literature, which does not specify whether or not front vowels precede or follow the /k/ and /g/ variables. This will enable the findings of the current study to be related to previous literature.

A possible source of confusion is the way in which the allegedly incoming depalatalised variants [k] and [g] have been chosen in this study to serve as the application values against which factors are examined. This decision was made because the primary aim of this research is to examine how linguistic variation can be motivated by social factors. Given that linguistic factors influencing palatalisation are less of a concern, when the results of phonetic environment are examined, they should be considered in an inverse manner, i.e. if ‘elsewhere’ or (- high front environment) correlates with depalatalisation, then it can be presumed that high front environment correlates with palatalisation.

Another factor said to influence the use of (k) and (g) is the adjacency of the *muraqqaqa* ‘non-velarized’ (lit. soft) consonants /l/ and /r/ (cf. Johnstone, 1963, p. 213). In the present data, only a limited number of words occurred in this context, i.e. only *‘ilk* ‘chewing gum’, and *‘irg* ‘vein’. Given that such contexts have become extremely lexicalized in al-³Aḥsā³ Arabic, this factor was not considered in the final analysis.

Style

According to Labov (1972a), “styles can be ranged along a single dimension, measured by the amount of attention paid to speech” (p. 208). In his description of the sociolinguistic interview, Labov (1972a) draws a distinction between informal contexts, which are associated with casual style, and formal contexts, which involve careful/spontaneous style. Labov (1972a) also posits a third style correlating strongly with the amount of attention paid to speech, which is reading (a passage, a word list, or minimal pairs). Stylistic variation could also be influenced by other factors like topic, setting, and interlocutor (cf. Coupland, 1980; Dorian, 2010; Rickford & McNair-Knox, 1993).

With regards to the interlocutor, attention given to speech may create a pressure towards either convergence, where speakers adjust the way they speak to match the language of their interlocutors, or divergence, where speakers accentuate differences between them and their addressees (Giles et al., 1991). Speakers may also converge with or diverge from a non-present reference group (Bell, 1984). In either scenario, style shifts reflect acts of identity, i.e. association or disassociation from a speaker or a specific social group (Page & Tabouret-Keller, 1985). These acts of identity can only be understood as part of a social framework, wherein variants indexing social meaning are mediated by the ideological perceptions of speech community members (Irvine, 2002).

In the present study, the researcher served as the main interviewer, supported by several assistants. Given the relatively low number of tokens obtained from each assistant, it would not be possible to make comparisons between interviewers. Furthermore, not all participants necessarily discussed precisely the same topics. This is potentially complicated by the fact that, due to the generally recessive nature of the variables under investigation and the large number of excluded categorical speakers, a significant number of overlaps and incidences of non-orthogonality were detected. As such, topic was not considered in the analysis.

As mentioned previously, the phonological process of word-stem palatalisation has become lexically fossilised. As such, gaining sufficient numbers of tokens of lexical items that exhibit palatalisation solely through conversations was not possible. For this reason, picture elicitation tasks were devised to elicit more tokens. Reading tasks were avoided for two reasons: so that speakers would not shift into Modern Standard Arabic; and to maintain consistency between literate and illiterate speakers. Shifts in style were noticed during interviews. This might be related to the attention speakers pay to their own speech, which could rise as they move from conversations to picture elicitation tasks. Therefore, style was considered as a factor group consisting of the levels: conversation vs. picture elicitation. Given the diglossic nature of the context, the approach followed here is somewhat different from the Labovian perspective of style, which uses a passage, a word list, or minimal pairs. This difference should be taken into consideration while interpreting of the findings of the present study.

The (y) variable

Only one linguistic factor was considered in the analysis of the (y) variable, namely position in the word.

Position

In Gulf Arabic, /y/ is not phonologically conditioned (al-Qouuz, 2009; Holes, 1987; Taqi, 2010). However, it is conditioned in terms of position in other dialects. For instance, the [q] realisation is restricted to initial position in Khuzestan Arabic (Ingham, 2007), and to final position in Sudanese Arabic (Dickins, 2007). As such, it was considered in the analysis as a potential linguistic factor. Table 5 shows the levels within the position factor with examples.

Table 5 Levels within position

Factor	Levels	Example
Position	Initially	<i>qurfā</i> ‘room’
	Medially	<i>maqrib</i> ‘sunset’
	Finally	<i>šmāq</i> ‘men’s head scarf’

5.1.2.4 Transcription and coding of data

A total of 62 recorded interview hours were obtained from the interviews. It was therefore crucial to transcribe the spoken data collected. This

transformation into a written format would make the text amenable to coding and subsequent statistical analysis (Chand, 2009). However, any form of transcription is inherently limited, as it is nearly impossible to have a written form that can be used to faithfully reproduce spoken data. It might ideally be thought that transcription should be as detailed as possible to capture all the different levels of grammar, but in reality this will be “overly complicated, requiring years of research expenditure in time and funding” (Tagliamonte, 2006, p. 54). Furthermore, overly detailed transcripts tend to be “difficult to follow and assess” (Ochs, 1979, p. 44). This means that it is essential to carefully make informed decisions, based on the goals of the study and its time constraints, regarding what exactly to transcribe and what not to transcribe. Such selective filtering processes are necessary not only to minimise efforts, but also to focus on beneficial research questions and the different ways in which they may be answered (DuBois, 1992). A general rule is that transcripts should be “detailed enough to retain enough information to conduct linguistic analysis in an efficient way” and “simple enough to be easily readable and relatively easily transcribed” (Tagliamonte, 2006, p. 54).

Present research transcription protocols have been guided by the goals of the study, which require the transcription of phonological and morphophonemic variables in light of their linguistic constraints. As will be seen in sections 6.2.2, 7.2.4, 8.2.2, and 9.2.2, linguistic constraints are primarily manifested at the lexical and lexical boundary level. Having specified a number of variables in mind, only the lexical items that include any of these variables were transcribed. A hand-out was allocated for each

participant. It consisted of number of sheets, the first of which was for the participant's demographic information. This was supplemented with multiple sheets for transcribing linguistic variables. Sheets are formatted horizontally with several columns standing for number, word, repetition, and comments. The number column was necessary to keep on tracking the number of different realisations of words. In the next column, words are transcribed phonetically. After this, the number of repetitions for each realisation of words is provided. The last column was assigned to write comments that relate to the way that certain items are realised. With the (k) and (g) variables, the sheet had two sections, one for the conversation part and the other for the picture elicitation task.

The process of transcription is not rigid, and is subject to modification and repeated revisions based on the information obtained as the data unfolds. For instance, I started transcribing using only two variants for the word-stem (k) variable, namely [k] and [č]. After listening to more speakers, I realised that there is another less frequently used variant which is [š]. So it was necessary to listen to the recordings again and revise the coding.

An issue that needs to be addressed regarding data transcription relates to both reliability and validity. Reliability is concerned with maintaining consistency of transcription, both within the transcriber and across transcribers. In the present study, I was the only transcriber. In order to maintain reliability, I listened to the digital recordings multiple times on different occasions, thereby ensuring that they had been transcribed

consistently. On the issue of validity, where the main question is whether a transcription reflects ‘articulatory facts’ or ‘auditory impressions’ (Kerswill & Wright, 1990, p. 258), it must be said that the variants under investigation are easily aurally identified. There were only a few instances of obscure or indistinct sounds, resulting either from exceedingly fast speech or from speakers’ lowering their voices. Such tokens were eliminated from analysis.

5.1.2.5 Statistical modelling and software

Effective data analysis requires the researcher to select the most appropriate statistical method for their data. Statistical analysis can be conducted using either a univariate or multivariate method. Univariate analysis provides a separate or one-to-one handling of the relationship between the independent social variable and the dependent linguistic variable without considering other social or linguistic variables. Univariate analysis may be carried out by calculating percentages, or using statistical tests such as chi-square (Johnson, 2009). In contrast, a multivariate analysis “give[s] more accurate results, because while computing the effect of one independent variable, it explicitly controls for all other known independent variables.” (Guy, 1993, p. 237). Achieving this requires the creation and use of a multiple logistic regression variable rule program. The history of the program goes back to Labov’s (1969) ‘variable rule’ which was mathematically implemented by Cedergren and Sankoff (1974). The program is the outcome of the mutual efforts of several researchers who tried to technically improve it over several phases, which include VARBRUL (Sankoff, 1988b), GoldVarb 2.0 (Rand & Sankoff,

1990), GoldVarb X (Sankoff, 2005), and GoldVarb Lion (Sankoff, Tagliamonte, & Smith, 2012). According to Johnson (2009, p. 395),

[a] variable rule program evaluates the effects of multiple factors on a binary linguistic ‘choice’ – the presence or absence of an element, or any phenomena and treated as an alternation between two variants. The factors can be internal (linguistic), such as phonological or syntactic environment, or external (social), for example, speaker gender or social class. The program identifies which factors significantly affect the response variable of interest, in what direction, and to what degree.

There are two different types of variable rule analysis: binomial one-step, and binomial step-up/step-down. In binomial one-step analysis, all cells are examined at once, which allows the identification of the cells which fit the model the least, and the respective tokens to be eliminated. Binomial step-up/step-down, in which cells are analysed one step at a time, is more favoured in sociolinguistic research because it enables testing statistical significance and relative strength of factor groups, i.e. which factor groups are most or least significant. The procedure for this consists of step-up and step-down parts. In the step-up part, all factor groups are tested to see which significantly increases the log likelihood, which is a “measure of fit of the model to the data” (Tagliamonte, 2006, p. 224). The program starts by presenting the most significant factor, then it incrementally adds the next most significant factor until a final combination of factors is reached; to which no further factor groups could be added to make a significant effect. In the step-down part, the program starts with presenting a model that contains all factor groups. The program then incrementally subtracts the factor groups

which least significantly affect the model until a final set of factor groups is reached, from which no further factor groups could be deleted without affecting the significance of the model. Ideally, where there are no major interactions between factor groups, the step-up and step-down findings must match (Tagliamonte, 2006).

VARBRUL has been used in sociolinguistic research for over thirty years. Nonetheless, the most common version of this program, GoldVarb X (Sankoff, 2005), has been criticised for being slow, inflexible, and limited. More importantly, it is considered anti-conservative because it is vulnerable to type I errors, in which a chance effect is misidentified as a real one. In other words, GoldVarb is said to overestimate the significance of results (Johnson, 2009). This is related to the way it is based on fixed-effects modelling, which treats factors as replicable and non-random. This poses problems for factors such as the individual speaker, which are usually non-replicable and random. This means that the influence of the individual speaker will either have to be overlooked or treated as a fixed-effect factor. If a specific individual happens to use a particular variant more or less often than others in the same social group and is disregarded, then this will negatively affect the results. Findings will therefore only pertain to the individuals included in the sample and will not be generalizable to the larger population. On the other hand, treating the individual as a fixed-effect factor will entail that only one token is taken from each individual (Tagliamonte & Baayen, 2012); something very unpractical because it will require including an enormous number of participants.

Another criticism relates to the way in which GoldVarb presents results using idiosyncratic terminologies that are not readily comprehensible to researchers in other fields. Johnson (2009, pp. 360–362) gives a number of examples to illustrate this point. For example, suppose that we are hypothetically examining the influence of style on realising the (-ing) variable as either [-iŋ] or [-in]. In conventional variable rule analysis, style would be considered a ‘factor group’ and the different styles investigated (e.g. spontaneous speech, reading passage, reading word lists) would be termed factors. GoldVarb would return an overall ‘input’ probability, i.e. the average frequency of occurrence of [-in]. For each style factor it will also give a ‘factor weight’, i.e. a probability scale ranging from 0 to 1, in which values greater than .5 have a favouring effect of the use of the application value, while values smaller than .5 have a disfavouring effect. In most other disciplines, different terminologies will be used to describe logistic regression analysis. For instance, GoldVarb ‘factor groups’ would be referred to as ‘factors’ and would consist of ‘levels’. A method similar to the way GoldVarb reports factor effects is called ‘sum contrast’, which is a coefficient for the deviation from the mean. Another is ‘treatment contrast’, where one of the levels is given a coefficient of 0 and is considered a baseline against which other levels are compared. Another difference lies in the way the coefficient units are realised. Rather than having factor weight probabilities ranging from 0 to 1, it uses log-odds that can take any positive or negative values.

To amend some of the problems associated with GoldVarb, while still allowing replication of some of its original functions, Johnson (2008) introduced a newer and faster program called Rbrul. This program functions within the statistical environment of R and it offers the possibility of using mixed-effects modelling, while still allowing GoldVarb style fixed-effects modelling. In other words, it allows the investigation of both fixed- and mixed-effects. Including the individual speaker as a random mixed-effect factor will help avoid fitting the data into individuals and enables the researcher to sample many tokens from the same speaker in a way that helps invigorate statistical analysis. Factor groups will only be selected as significant “when they are strong enough to rise above the inter-speaker variation” (Johnson, 2009, p. 365). The trade-off is that mixed-effects analysis is conservative and more likely to cause type II errors, in which significant effects are not identified as significant. Although it might fail to consider some significant factors, mixed-effects analysis is generally held to provide more accurate results than fixed-effects analysis (Johnson, 2009) on the simple basis that being conservative and establishing only what we are confident of is better than overestimating findings and possibly claiming something that is not actually true. With both pieces of software, “only data from more speakers could help us decide conclusively whether we are dealing with Type I error by GoldVarb or Type II error by Rbrul” (Johnson, 2009, p. 376). Another advantage associated with Rbrul is that it enables the researcher to explicitly recognise the place of the individual in comparison to others in same group (Tagliamonte & Baayen, 2012). It also provides an option to directly check interactions. Rbrul also presents results in both factor

weight and log-odds units, which enables it to bridge the gap between sociolinguistics and other fields (Johnson, 2009).

The present study uses Rbrul to analyse data. Mixed-effects analysis is used with all variables. With some variables which had only one factor selected as significant, such as the (y) and (-i) variables, additional fixed-effects analyses were conducted in an attempt to discern whether any other potentially significant factors exist. A general description of some of the terminology used in mixed-effects analysis and how the results are presented in tables will be given next.

In order to effectively conduct an analysis using R statistical software, it is recommended to code the transcribed material into .csv files, which are comma-separated value files (cf. Johnson, 2009). Coding is “the procedure by which raw data is transformed into tokens” (Paolillo, 2002, p. 55). These tokens can then be identified and dealt with by the statistical analysis software. Initially, all tokens of lexical items that had the variables under investigation were coded. Words that fell outside the circumscribed variable context were removed. Then, in accordance with the suggestion of Wolfram (1993), only three tokens of each word per speaker were included, in an attempt to reduce any possible lexical effects.

Mixed-effects analysis using Rbrul enables the inclusion of binary, multinomial and continuous levels within the independent factors. However, it requires the coding of discrete binary variants or continuous variants for the

dependent linguistic variables. In the present study, the (g) variable involves two distinct variants that can be easily aurally determined, i.e. [g], and [j]. On the other hand, the (k), (ɣ), (-i), and (-ik) variables are multinomial. This means that they involve more than two variants that cannot be placed, on the basis of plausible linguistic justification, on a graded or continuous scale. Paolillo (2002) gives a number of suggestions to deal with multinomial variants. One of these is to continuously group similar variants until binary groups of variants are reached. To justify such confluations, there must be some form of linguistic basis, e.g. phonetic environment, or non-inherent values, e.g. 'standard' vs. 'non-standard'. The multiple variants of (k), (ɣ), and (-i) were therefore conflated based on linguistic rationale. The limited number of tokens available for some variants further supported their confluations with other linguistically related variants, e.g. the conflation of [č] and [š] because they are both palatalised. Another way to deal with multinomial variants is to conduct a series of analyses each having a different combination of binary variants. If we apply this to the the (-ik) variable, which has three variants, namely [-(i)k(i)], [-(a~i)č], and [-(a~i)š], we will end up with three parallel analyses: [-(i)k(i)] vs. [-(a~i)č], [-(i)k(i)] vs. [-(a~i)š], and [-(a~i)č] vs. [-(a~i)š] as shown in Figure 3.

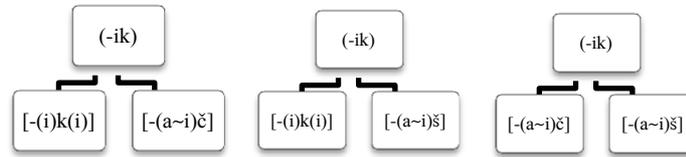


Figure 3 Parallel analyses of (-ik) variants

According to Paolillo (2002), comparison of the results of various analyses for the different pairs of variants will “result in a large number of analyses, whose comparison can be problematic if different factor groups are significant in the constituent analyses, or if incomparable subsets of data are used to estimate them” (p. 94). Therefore, another option is to use logistic regression programs that permit multinomial analysis, such as VARBRUL 3M or Tvarb. According to Paolillo (2002), multinomial VARBRUL analyses are rarely used because they lack features such as the step-up and step-down procedures needed for testing significance. They are also considered difficult to interpret because they have a large number of estimated factor weights compared to binomial analyses.

Paolillo (2002) states that the best way to deal with multinomial variants is to treat them in the form of structured binary choices. This can be done by conducting binomial analysis at different levels, i.e. hierarchies of two-way choices. Considering the (-ik) reflexes there do not seem to be sensible grounds for conflating $[-(i)k(i)]$ with $[-(a\sim i)\check{c}]$, or $[-(i)k(i)]$ with $[-(a\sim i)\check{s}]$, for instance, as consonantal variants in both combinations belong to different places and manners of articulation. However, the variants $[-(a\sim i)\check{c}]$

and [-(a~i)š] could be conflated on the basis that both consonants involved are coronal or palatal. In this sense, they could be contrasted with [-(i)k(i)], which has a dorsal consonant. Another justification relates to extrinsic values associated with these reflexes. While on the one hand, [-(i)k(i)] is assumed to be the prestigious supra-local variant approximating Modern Standard Arabic. On the other, [-(a~i)č] and [-(a~i)š] are the less prestigious local variants. Nonetheless, if we restrict analysis to this level, it is possible that information might be lost regarding any existing differences between [-(a~i)č] and [-(a~i)š]. Therefore, as shown in Figure 4, a second level of analysis is conducted to compare [-(a~i)č] against [-(a~i)š].

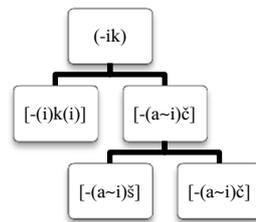


Figure 4 Levels of (-ik) analysis

5.1.2.6 Interpreting Rbrul output

The effective interpretation of Rbrul results requires the researcher to first identify the application value of the linguistic variable under investigation. In the present study, the hypothesised rule is that there is a shift from local variants to supra-local variants. Therefore, with all variables, the application values are the hypothesised supra-local variants. For example, [g] is the application value for the (g) variable; whereas /j/ is the non-application value. Because the analysis of the (-ik) variable is done at two levels, it has two

application values. At the first level, the supra-local $[-(i)k(i)]$ variant is considered the application value; whereas both $[-(a\sim i)\check{c}]$ and $[-(a\sim i)\check{s}]$ are the non-application values. At the second level, $[-(a\sim i)\check{c}]$ is considered the application value, whereas $[-(a\sim i)\check{s}]$ is the non-application value.

Factor groups are listed in mixed-effects tables according to significance, reported in p values at the .05 level, in descending order. Within each factor group, factor levels are ranked in a hierarchical order from those that use the application value the most, to those using it the least. Results are mainly reported in log odd units, which are the raw co-efficients of the logistic regression model. These could be any number from positive infinity to negative infinity, with the size of the number indicating the size of the effect. This means that the larger the number, the stronger the correlation between the dependent variable and the independent factor, while the smaller the number, the more moderate the correlation between them. To make results accessible to researchers familiar with GoldVarb, Rbrul also allows the presentation of results in cantered-factor weights, i.e. probability scales ranging from 0 to 1. In this system, values greater than .5 have a favouring effect of the application value, while values smaller than .5 have a disfavouring effect. The complexity of the model is measured in terms of degrees of freedom (df) or the number of parameters included in the model. Deviance refers to how well the model predicts the actual data: the smaller the deviance, the better the fit. The grand mean refers to the total proportion of the application value. In mixed-effects models, Rbrul also reports the standard deviation of random effects such as individual speaker. After

measuring the fixed effect of the whole group, individual variation in the group is estimated. The result shows the amount of dispersion from the mean. A low standard deviation indicates that individual points are very close to the average, whereas a high standard deviation indicates that individuals are spread over a wide range of data points. Table 6 presents an example of Rbrul results, which is reproduced from Table 21. It displays the results of the (-i) variable, which has two variants [-i] and [-ya], with the [-i] variant as the application value.

Table 6 Sample of Rbrul results

Total N 1416	Deviance 1328.747	df 4	Grand mean 0.471		
Individual Speaker Standard Deviation 1.308					
Factor group	Factors	Log odds	N	Proportion of application value	Centred factor weight
Age/education p= 1.52e-05	Adolescent, young & middle-aged	1.748	874	0.665	0.852
	Educated/elderly	-0.482	56	0.232	0.382
	Non-educated/elderly	-1.266	486	0.150	0.22
Not selected as significant: Gender					

Chapter 6 The (k) and (g) variables in word stems

6.1 Introduction

The remaining chapters until the conclusion chapter seek to provide a cogent discussion of the linguistic variables investigated in the present study. The present chapter focuses on an examination of the phonological variables (k) and (g). The following three chapters deal with the 2nd person singular feminine object/possessive suffix (-ik) (Chapter 7), the phonological (y) variable (Chapter 8), and the 1st person singular possessive/object pronoun (-i) (Chapter 9). Each of these chapters begins with a review of past research, covering topics related to processes of change and the way they occur in Arabic and other languages. Other topics that are addressed in these chapters include the linguistic constraints, geographical distribution, and social constraints of the linguistic variables. It should be noted here that this study is primarily concerned with processes that involve a change towards the supra-local or the standard form, i.e. de-palatalization of /k/ in both word stems and the suffix as well as in /g/, non-stopping of /y/, and the move from [-ya] to [-i]. However, these chapters will also provide information on the reverse processes, i.e. palatalization of word stem and suffix /k/ as well as /g/, stopping of /y/, and the move from [-i] to [-ya]. This decision has been made in recognition of the premise that the knowledge of the reverse processes will foster better understanding of the course of linguistic change. Specifically, it will enable recognition of what the historical form was, how it developed into the local linguistic features via natural phonological processes, and how a recent development is reintroduced into the dialect through diffusion and

awareness (see section 7.4.1.2), e.g. (historical) k > (local) č > (supra-local) k (see section 6.2.3). In each chapter, the literature review is followed by a description of the way in which the variable contexts were circumscribed and coded. After this, the overall distribution of the linguistic variables will be presented, followed by the mixed-effects findings.

This chapter handles the linguistic and social patterning of the process of (k) and (g) depalatalisation in word stems in the Arabic dialect of al-ʿAḥsāʾ. Depalatalisation has been widely studied in Arabic sociolinguistic studies. Such studies provide illuminating insights into the norms of linguistic diversity and how they are linked to social factors. Within these studies, it is often claimed that the localised palatalised variants, i.e. [č, ć] and [j, dz], are giving way to the urban and supra local depalatalised variants, i.e. [k] and [g] (cf. Abdel-Jawad, 1981; al-Amadidhi, 1985; Alessa, 2008; al-Muhannadi, 1991; al-Rojaie, 2013; Holes, 1987). This is applicable to the Saudi context, where this linguistic process is alleged to be resulting from regional dialect contact and koinéisation (al-Azraqi, 2007, p. 233) as well as to be primarily diffusing from the capital city, Riyadh. The aim of this chapter is to unravel any existing structured variation and to situate the findings of depalatalisation patterns in the dialect of al-ʿAḥsāʾ against the wider frame of relevant strands of research: previous studies on synchronic and diachronic processes of (k) and (g) palatalization in other languages of the world, as well as past research on regional synchronic processes and how they are related to social factors.

This chapter starts with a general overview of palatalisation and how it is manifested in the histories of languages generally and in Arabic in particular (section 6.2.1). The linguistic conditions governing palatalisation in Arabic dialects is described next (section 6.2.2). After this, the geographical distribution of the realisations of /k/ and /g/ in the Arabian Peninsula is provided (section 6.2.3), followed by a review of Arabic sociolinguistic studies addressing word-stem (de)palatalisation (section 6.2.4). A description is then given for the way in which linguistic variables were circumscribed (section 6.3.1), i.e. how the variants and their place of occurrence are delimited (Tagliamonte, 2006, p. 13). Coding of dependent and independent factors is then described (section 6.3.2). After the specification of variants, decisions are made on which of these will be included unchanged and which ones to conflate. In addition, potentially related linguistic and social factors are specified and subdivided into levels.

Generally, two analyses were conducted. The first of these dealt with (k) in word stems, which could be realised as [k], [š] (IPA [ʃ]) or [č] (IPA [tʃ]). The second analysis handled the (g) variable, which could be realised as [g] or [j] (IPA [dʒ]). Both variables were examined in relation to socio-sectarian affiliation (Sunni vs. Shiite), age/education (adolescent & young, middle-aged, educated/elderly, or non-educated/elderly), gender (male vs. female), phonetic environment (high front environment vs. elsewhere), and style (conversation vs. picture elicitation).

Later, distributional and multivariate results of (k) and (g) in word stems is discussed (section 6.4). Findings generally indicate that depalatalisation of (g) and word-stem (k) is highly advanced in al-ʿAḥsāʿ Arabic and is strongly correlated with age/education, socio-sectarian affiliation, and gender. More particularly, adolescent and young Sunni females are found to be progressively shifting towards the use of the supra local variants [k] and [g]. Meanwhile, non-educated elderly Shiite males are steadily maintaining the local variants [č], [š], and [j]. Due to the recessive nature of palatalisation, linguistic constraints were found not to have an influence on palatalisation. The variables (k) and (g) differed in terms of how they are stylistically treated by participants. Speakers made shifts in style towards the supra local variant with only the (g) variable, thereby demonstrating a stigmatisation of the palatalised variant [j]. This pattern of variation is suggestive of a change in progress towards a developing supra local koiné diffusing from the capital city Riyadh to other cities and towns.

6.2 Review of previous studies

As well as in Arabic dialects, palatalisation has been manifested in the histories of many other languages around the world. Below is a brief review of palatalisation; followed by a description of the linguistic constraints governing (de)palatalisation. After this, previously identified correlations between (de)palatalisation patterns and social factors in some Arabic dialects will be reported.

6.2.1 Palatalisation in Arabic and other languages

Palatalisation generally refers to the processes by which velars and dentals become palatals or gain a secondary palatal articulation. It covers three processes (tongue-raising, tongue-fronting, and spirantisation), which could occur separately or in combination (Bhat, 1978, p. 47). Palatalisation is usually induced in the environment of a front vowel (especially /i/ and /e/), a palatal semivowel, or low front vowels (Bhat, 1978, p. 60). In order to be able to refer to studies dealing with reflexes relevant to ones investigated in the present study, the broad cover term of palatalisation will henceforth be narrowed to describe only the processes by which velar stops shift in place of articulation to an anterior position and develop a fricative or an affricate release. More particularly, this term will be used to describe the processes by which the voiceless velar plosive /k/ is turned into either the voiceless palato-alveolar fricative [š] (IPA [ʃ]), the voiceless palato-alveolar affricate [č] (IPA [tʃ]) or the voiceless alveolar affricate [ć] (IPA [ts]), as well as to the way the voiced velar plosive /g/ is changed into either the voiced palato-alveolar affricate [j] (IPA [dʒ]) or the voiced alveolar affricate [dz].

In this sense, palatalisation is common across many languages. It is historically found as [k] > [č] in Old Indo-Iranian, e.g. *kit* ‘also or even’ (Old Persian *čit*) (Sims-Williams, 1998, p. 134), and Old English, e.g. *kēowan* > *chew* and *kirika* > *church* (Fortson, 2004, p. 395; Lass, 1997). Also, it is found in Pre-Slavic as [k] > [č], e.g. *rok-ika* > *ročika* ‘little hand, handle’ and as [g] > [dz], e.g. *slug-iti* > *sludziti* ‘to serve’ (Carlton, 1991; Fortson,

2004, p. 420). From Latin to proto-Gallo-Romance, it is found as [k] > [č], e.g. *merkede* < *mercede* ‘pity, favour, grace, or heavenly reward’ and [gⁱ] > [j], e.g. *gⁱente* > *jente* ‘people’ (Arteaga, 2013, p. 108). Contemporarily, palatalisation as a synchronic processes of allophonic variation is found in Russian in the form of [k] ~ [č] especially when suffixed, for instance, to the diminutive *-ek* or the infinitive marker *-tⁱ*, e.g. *fartuk* ‘apron’ ~ *fartuček* ‘little or nice apron’ and [g] ~ [j], e.g. *drug* ‘root of friend’ ~ *drujitⁱ* ‘to be friends’ (Kapatsinski, 2010, pp. 3-4). In Modern Greek it is manifested as [k] ~ [č], e.g. *keros* ~ *čerros* ‘weather’ (cf. Newton, 1972, p. 146; Trudgill, 2003, pp. 54–55). In relation to Semitic languages, it is synchronically found in the (non-Arabic) Modern South Arabian languages of Mehri, e.g. *yaggēn* ~ *yajjēn* ‘boy’, and Hobyōt, e.g. *yoggīt* ~ *yojjīt* ‘big girl (Simeone-Senelle, 1997, p. 383).

In Arabic, apparently phonologically conditioned synchronic alternations between [k] and [č] are attested in the speech of sheep-rearing nomads in the Syrian-Jordanian desert (Cantineau, 1936, 1937), as well as in the dialect of as-Salt, Jordan (Herin & al-Wer, 2013). Synchronic variation between [k] and [č], in addition to [g] and [j], assumed to be phonologically conditioned, has also been observed in Baghdad, Kuwait (al-Tajir, 1982; Maṭar, 1970; Taqi, 2010), Qatar (al-Muhannadi, 1991; al-Tajir, 1982), Abu Dhabi (al-Tajir, 1982), Bal-Qarn in the southern the Ḥijāz and Tihāmah, and Bani Bishr in Qaḥṭān and Najrān (Prochazka, 1988). In Bahrain and al-ʿAḥsāʾ, presumably phonologically conditioned synchronic variations between [k] and [č] and [g] and [j] have been reported (cf. al-Tajir, 1982; Holes, 1987;

Prochazka, 1988; Smeaton, 1973). In Najd, the /k/ and /g/ phonemes are synchronically fronted even more to become [č] and [dz] again under similar phonological conditions (Ingham, 1994; Prochazka, 1988). These sounds have also been attested in Madina among the Rubuga, among the Misacila of the Banu ʿAmr in Wādī al-Furūʿ, and in the Sihliyyah of the Banī ʿAwf in Wādī an-Nagīʿ (il-Hazmy, 1975).

Before moving on to a discussion of the conditions under which /k/ and /g/ have become palatalised in certain Arabic dialects, two separate instances of /k/ palatalisation in Arabic dialects should be distinguished. The first is palatalisation in the 2nd person feminine singular object/possessive suffix pronoun (Classical Arabic *-(a~u~i)k(i)*), as discussed in Chapter 4. The second is /k/ palatalisation in all other contexts, i.e. essentially in word stems, and this will be discussed in more detail in the next section. A number of reasons support such a separation. First of all, palatalisation in word stems has previously been reported to be conditioned to high front vowels (see section 6.2.2), whereas palatalisation in the 2nd person feminine singular object/possessive suffix is unconditioned, especially given the general absence of vowels marking case endings in Gulf dialects. In addition, unlike phonemic /k/, morphophonemic *-ik* carries a semantic value of expressing the difference between male and female addressees. This semantic function is said to help advance palatalisation and to hinder depalatalisation processes (see sections 7.4.1 and 7.2.2). Furthermore, and as will be discussed in more detail in sections 6.2.3 and 7.2.3, dialects in the Arabian peninsula that have a conditioned palatalisation of Old Arabic /k/ to [č] or [ć] realise the 2nd person

singular feminine suffix as *-(i)č* or *-(i)ć* respectively (Holes, 1991, p. 657). On the other hand, dialects which have no palatalisation or an unconditioned palatalisation of Old Arabic /k/ to [č] use *-(i)š* (Holes, 1991, p. 565). Such discrepancies in the realisation of /k/ between word stems and the suffix found at least as regards the *-(i)š* reflex gives an indication that the two linguistic features should be treated separately. This is further complicated by the fact that many speakers in al-ʿAḥsāʾ actually alternate between *-(i)š* and *-(i)č*. Findings of this study (sections 6.4.1 and 7.4), which indicate that depalatalisation processes is considerably more advanced in word stems than in the suffix, provide further justification for such a separation.

6.2.2 Linguistic constraints on word-stem (de)palatalisation in Arabic

Unconditioned affrication of Old Arabic /k/ to [č], i.e. the use of [č] in all environments, is used by very few groups. For instance, this feature is exhibited by speakers found in central Jabal ʿAxdār villages in Oman and in some Shiite villages located in north-east and east Bahrain (Holes, 1991, p. 656). Unconditioned affrication of /k/ also appears in the speech of peasants living in ʿAmmān, e.g. *čil ~ kul ~ čul* ‘all’, *kin ~ čin ~ čun* ‘if’ (Abdel-Jawad, 1981, p. 295). Previous studies suggest that /k/ and /g/ (< Classical Arabic /q/) palatalisation, is conditioned to contexts where it occurs in contiguity with short and long front vowels (Holes, 1987, p. xviii; il-Hazmy, 1975, p. 60; Johnstone, 1963, p. 210, 1967, p. 2), e.g. *sikkīn ~ siččīn* ‘knife’, *simak ~ simač* ‘fish’ (cf. Johnstone, 1967, p. 4), *kēf ~ čēf ~ céf* ‘how’ (il-Hazmy, 1975, p. 61; cf. Johnstone, 1963, p. 217), *giddām ~ jiddām ~ dziddām* ‘in front/ forward’ (cf. Johnstone, 1963, p. 217), and *ḥarīgah ~ ḥarījah ~ ḥarīdzah*

‘fire’. Palatalisation commonly appears in contiguity with high front vowels (cf. al-Rojaie, 2013, p. 51; Mustafawi, 2005, p. 153, 2006, p. 4). However, palatalisation may or may not occur with the vowels /a/ and /ā/, depending on whether or not they are fronted or backed, e.g. *rakab* (back vowel) ~ *račab* (front vowel) ~ *ričib* (front vowel) ‘he rode’ (Johnstone, 1963, p. 218). Palatalisation is also triggered in adjacency of *muraqqaqa* ‘non-velarized’ (lit. soft) consonants such as /r/ in ‘*irdz* ‘throat’ (cf. Johnstone, 1963, p. 213). On the other hand, palatalisation is said to be restricted in the environment of emphatics (cf. Johnstone, 1963, p. 220), gutturals and back vowels (Johnstone, 1967, p. 6), e.g. *šakk* ~ **šačč* ‘he closed’, *ħagg* ~ **ħajj* ‘belongs to’, *riyūg* ~ **riyūj* ‘breakfast’.

The above conditions do not appear to be entirely obligatory, certainly not for all dialects that exhibit conditioned palatalisation. In other dialects, these linguistic conditions appear to apply, but only with numerous exceptions. For instance, and with certain lexical items, palatalisation may fail to take place even where the condition of high front environment is satisfied, as found in the dialect of Qatar e.g. *kaslān* ~ *časlān** ‘lazy’, *digīga* ~ *dijjija** ‘minute’ (cf. Mustafawi, 2005, p. 152). On the other hand, palatalisation sometimes takes place even in the vicinity of back vowels. For example, plurals of the CiCūC pattern tend to retain the palatalisation of their singular forms, e.g. *‘ilč* ~ *‘(i)lūč* ‘chewing gum’, *dīč* ~ *ḏ(i)yūč* ‘cockerel’, *ħalj* ~ *ħlūj* ‘throats’ in eastern Arabian dialects (cf. Blanc, 1964, pp. 25–28; Johnstone, 1967, pp. 220–221). This is also quite common with loan words, such as *‘iđj* and *‘(i)đūj* ‘date raceme’ (Persian). In such words, the palatalised realisations

initially appear to be acquired as independent phonemes (Johnstone, 1963, p. 221), but may later become subject to hypercorrection and turn into allophones of velars. This is common in the dialect of al-ʿAḥsāʾ where *ʿiǰj* and *(i)ǰūj* ‘date raceme’ are realised as *ʿiǰg* and *(i)ǰūg* respectively. Finally, palatalisation may sometimes occur near back vowels, apparently to avoid homophony between pairs of words that have distinct meanings but a single etymological source, e.g. *kǰūf* ‘palms’ and *ǰǰūf* ‘gloves’ (cf. Johnstone, 1967, p. 222).

In addition to the aforementioned exceptions, and with the emergence of depalatalisation processes, palatalisation is now clearly lexically fossilised in many dialects. In his study of the differences between the ‘Arabs and the Baḥārnah in Bahrain, Holes (1987, pp. 35–58) found the [č] and [j] realisations of /k/ and /g/ to be occurring as fossilised reflexes in a large number of words, e.g. *čǰǰf* ‘how’, *čǰilma* ‘word or comment’. Similarly, palatalisation of the /g/ phoneme was found to be largely confined to a closed set of lexical items in the dialect of Qatar (al-Muhannadi, 1991).

After examining many examples found in several dialects (cf. Holes, 1987; Johnstone, 1963, p. 1988; Prochazka, 1988), in addition to the al-ʿAḥsāʾ data collected for this study, it would be nearly impossible to claim that two dialects have a matched list of lexical items with parallel palatalisation patterns. It also does not seem to be possible to find a dialect in which palatalisation occurs only in the vicinity of front vowels. What most of these dialects have in common is that palatalisation is found in contiguity of front

vowels and is generalised, variably in each dialect, to other derivations and inflections of the same stem.

Interdialectal differences in terms of lexical items selected to be palatalised have been noted by Johnstone (1963), who gave several examples of differences between Kuwait, Bahrain, ‘Unayza, Abu Dhabi, Qatar and Buraimi. For instance, and at the time he conducted his study, *čalām* ‘talk’ was used in Buraimi, but in ‘Unayza *kalām* was used instead (Johnstone, 1963, p. 218). Also, in Kuwait they used to say *yifaččir* ‘he thinks’, but in Bahrain, the word *yifakkir* was more common (Johnstone, 1963, p. 218). Holes (1987, pp. 57–62) also observed differences in terms of the range of lexical items exhibiting palatalisation across the social groups of Sunnis, urban Shiites, and Shiite village-dwellers. In his study, he divided lexical items into two groups: those which are palatalised by all social groups (i.e. shared items), such as *biča* ‘he wept’, *čěl* ‘measure or amount’, and those which are palatalised by only one social group (i.e. non-shared items), such as *faččar* ‘he thought’, and *čiθir* ‘amount’ which are used by Sunnis only, and *čubr* ‘size’, *iftačč* ‘he got free of something’, and *mičān* ‘place’ which are used only by Shiite village-dwellers.

The tendency of phonemic variation to take place only in subsets of lexical items is by no means limited to Arabic dialects. In her Belfast study, Milroy (1980, p. 118) observed a set of lexical items that had [ʌ] and [ɥ] alternations, e.g. *foot*, *took*, *shook*, and *look*, and another set that were realised using only [ɥ], e.g. *soot*, *cook*, *book*, *hook*. Milroy (1980) coined the

term ‘phonolexical’, which refers to “a small set of lexical items which alternates between two phonetically divergent classes” (p. 118), as illustrated by the above examples.

Herin & al-Wer (2013) attempt to explain dialectal differences in terms of the range of palatalisation in Arabic lexical items. They (2013, p. 59) postulate that in certain dialects, palatalisation may not be an outcome of a systematic sound change but rather a result of lexical diffusion from neighbouring dialects. In such cases, borrowings of lexical items are subsequently followed by generalisations of palatalisation to other derivations or inflections belonging to the same root even if they did not have /č/ in the original dialect (Herin & al-Wer, 2013, p. 59). They (2013, p. 59) also investigated the Jordanian as-Saltı dialect and claim that it has borrowed some lexical items with /č/ from North Arabian Bedouin dialects, following which overgeneralised palatalisation has occurred to other derivations and inflections not originally found in North Arabian Bedouin dialects. An example illustrating this point is *dīč* ‘cockerel’ and *dyūč* ‘cockerels’ found in as-Saltı dialect. In north Arabian dialects, these words are realised as *dīk* and *dyūk* (Herin & al-Wer, 2013, p. 59).

Finally, (de)palatalisation also seems to be influenced by style. According to Abdel-Jawad (1981, pp. 277–324), the [k] variant was introduced as part of standardisation processes in the dialect of ‘Ammān. It was considered a prestigious variant used by high status people (educated speakers with a wide social network), whereas the [č] variant was mainly

used by non-educated elderly speakers. The use of the [k] variant was very advanced in the dialect as a whole. In formal style, the [k] variant was almost categorical. Therefore, variability in the use of [k] and [č] appeared to be mostly in casual style.

6.2.3 Geographical distribution of /k/ and /g/ in the Arabian Peninsula

Modern dialects in the Arabian Peninsula have many realisations for Old Arabic /k/ and /q/. Old Arabic /k/ may be realised as [k], [k^j], [č], or [ć]. On the other hand, Old Arabic /q/ may be realised as [q], [g], [j], [dz] or [ḳ]. Generally, each of these variants is used in a certain geographical area.

Holes (1991) provides a geographical sketch for the use of Old Arabic /k/ and /q/ in the Arabian Peninsula, dividing dialects into four groups according to their use of Old Arabic /k/ and /q/: southern, western, central and eastern (Holes, 1991, p. 655). Holes (1991, p. 655) subdivides southern dialects into two groups, namely those which do not affricate at all, and those which have an unconditioned affrication of /k/ only. He (1991, p. 655) holds that non-affricating southern dialects generally realise Old Arabic /k/ as [k]. In the case of Old Arabic /q/, Holes (1991, pp. 655–656) states that it is realised as voiceless [q] by sedentary speakers living in the south-west of Yemen, as well as the mountain and mountain fringes of northern Oman, whereas it is realised as [ḳ], a retracted variety of velar /k/, by Shiites living in villages located in central Bahrain. These Shiites realise Old Arabic /k/ as palatalised [k^j] (Holes, 1991, pp. 655–656). On the other hand, affricating southern dialects use [ḳ] for Old Arabic /q/ (Holes, 1991, p. 656). According

to Holes (1991, p. 659), these dialects have subsequently had an unconditional affrication of Old Arabic /k/ to [č] to avoid losing the phonological distinction it has with /q/, which as stated earlier has already turned into [ḳ]. Affricating southern dialects are spoken by people living in central Jabal ʿAxdar villages in Oman and in some Shiite villages located in north-east and east Bahrain (Holes, 1991, p. 656).

Concerning western dialects, it has been argued that they exhibit no affrication (Holes, 1991, p. 657). Holes (1991, p. 5657) notes that they either have [k] or palatalised [kʲ] for Old Arabic /k/. In relation to Old Arabic /q/, it is realised as [q] in the south-west of Yemen, and as [g] in the Tihāmah coastal corridor (Holes, 1991, p. 657). Regarding central dialects, Holes (1991, p. 657) states that they have a conditioned affrication of Old Arabic /k/ and /q/ to [č] and [dz] respectively when they occur in high front environments. Holes (1991, p. 656) then states that eastern dialects are mainly affricating dialects consisting mainly of two types. The first of these involves conditioned affrication of Old Arabic /k/ and /q/ to [č] and [j] respectively in the environment of front-vowel (Holes, 1991, pp. 566–567). This is common in the speech of descendants of early 18th century settlers coming from Najd (see section 2.5), who now settle in Kuwait, Bahrain, northern Qatar and the UAE (Holes, 1991, pp. 566–567). With regards to Bahrain, Holes (1991, pp. 657–658) further specifies that affrication is characteristic of the speech of Sunnis living in al-Muḥarraḡ, al-Ḥidd, some parts of al-Manāma, Rifā^c, Budayya^c and in some small coastal villages, but not of the speech of Shiites, who have migrated much earlier than Sunnis into the area (see sections 2.2

and 2.5). Holes (1991, p. 658) adds that the first type is also found in Bedouin dialects used in the Syrian Desert and the western desert of Mesopotamia as well as villages in lower Iraq. As to the second type, Holes (1991, p. 658) states that it involves a conditioned affrication of Old Arabic /k/ to [č] only, i.e. Old Arabic /g/ is realised as [g]. This type is typical of some Shiites in Bahrain and al-ʿAḥsāʾ (Holes, 1991, p. 658). It is also found in the speech of urban Muslims living in southern Iraq, and of some sedentarised Bedouins living in east ʿAmmān (Holes, 1991, p. 658).

Guion (1998) attempted to explain palatalisation developments of this sort crosslinguistically. For instance, she explains that the co-articulation of /k/ and /i/ leads to the fronting of /k/ to the palatalised velar [kʲ]. She also states that articulatory factors are unable to account for the later shift to a coronal palato-alveolar [č]. She argues that, in high rate speech, velars occurring before front vowels are perceived in the mind of the hearer in the same way that palato-alveolar affricates are perceived because they are acoustically similar. This could potentially explain the shift from [kʲ] to [č], despite their relative distance from each other in the mouth. Next, the [č] becomes depalatalised to become its neighbour [ć]. With this approach, the phonological processes would be as follows: [k] > [kʲ] > [č] > [ć].

Holes (1991, pp. 666–667) suggests that the synchronic geographical distribution of the /k/ and /g/ forms in the Arabian Peninsula may be used to explain their diachronic developments, which reflect the movements of Arabic groups from Najd to the fringes of Arabian Peninsula. Holes (1991, p. 666)

proposes a specific outline for the chronological development of /k/ and /g/ as shown in Figure 5.

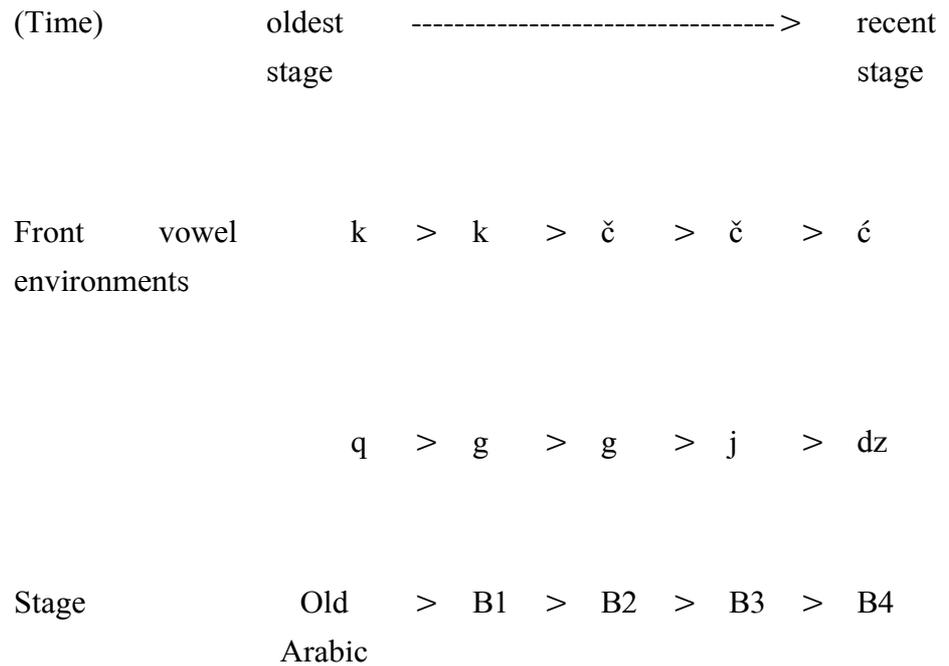


Figure 5 The chronological development of /k/ and /g/ (Holes, 1991, p. 666)

According to Holes (1991, p. 666), the first stage (Old Arabic) represents the initial state of pre-conquest Old Arabic dialects, which is synchronically found in some parts of Oman and Yemen. Holes (1991, p. 666) claims that /q/ became fronted and voiced to [g] in stage (B1). The exact starting date of this stage is difficult to ascertain, though it probably developed among Bedouin tribes who moved from the centre and settled in the southern parts of the Peninsula (Holes, 1991, p. 667). As discussed in section 3.3, some researchers generally oppose the hypothesis that Old Arabic began in a homogeneous form. Regarding this specific sound, Mustafawi (2006, pp. 15–16) refutes the assumption that /q/ is the underlying realisation

of /g/ based on the fact that affricating conditions (i.e. front vowels) are not met in some Classical Arabic forms to begin with, e.g. *qarīb* (Classical Arabic) and *jirīb* (Bahraini) ‘nearby’. This would mean that it is possible that both [q] and [g] have co-existed at some pre-diasporic Arabic point. However, if a diachronic phonological change $q > g$ was involved, then it seems to have been an unconditioned sound change. Since voiced uvular stops are very hard to pronounce, there is a clear functional pressure for [G] to be fronted to [g]. Stage (B2), where /k/ became affricated to [č], is presumed to have taken place by around the mid-13th century, at which point Bedouins started to migrate from Najd to the northern and eastern periphery of the peninsula, i.e. Jordan, Syria, Baghdad and lower Mesopotamia (Holes, 1991, pp. 666–667). As noted by Holes (1991, p. 666) the use of [č] is also found among some of the Baḥarnas of al-ʿAḥsāʾ and Bahrain. In Stage (B3), /g/ became affricated to [j] by around the late 18th century, when Najdī tribes migrated to Kuwait, Bahrain, Qatar, and U.A.E, again taking this feature with them (Holes, 1991, pp. 666–667). In Stage (B4), the alveolar fricatives [č] and [j] became further fronted to a dental position, which is the current state in present day Najd (Holes, 1991, p. 667). According to Holes’ hypothesis, affrication of /k/ preceded that of /g/.

In relation to the use of [č] and [j] in al-ʿAḥsāʾ Arabic, it is presumed that palatalisation of /k/ and /g/ took place in Najd, and was carried east by Najdī migrants during stage (B3). Findings of the present study also show that Shiites of al-ʿAḥsāʾ also have a very recessive use of [š]. This may have been borrowed from Modern South Arabian languages prior to their migration to

al-ʿAḥsāʾ from southern Tihāmah. Johnstone (1987) gives several examples of [š] in Modern South Arabian languages, e.g. Mehri š-m-m (<k-m-m) ‘teat mask for animal’ (p. 394), and central and eastern Jibbali š-r-š (<k-r-š) ‘belly’ (p. 214). It seems possible to rule out the possibility that al-ʿAḥsāʾ Arabic has borrowed this feature, i.e. the use of phonological [š] as a realisation of /k/, from Modern South Arabian languages, on the grounds that no such borrowings occur in dialects which have had similar exposure to Modern South Arabian languages such as those spoken in Yemen, Bahrain or Omani Jabal al-ʿAxdar. If that borrowing did not occur, then a possible explanation is that [š] in al-ʿAḥsāʾ Arabic is a result of analogical extension or overgeneralisation. In other words, the use of [š] in the suffix has been extended to other positions in the word.

6.2.4 Social constraints on word-stem depalatalisation

Blanc’s (1964) study of the relationship between socio-religious affiliation and linguistic choice in Baghdad Arabic represents an early attempt to address linguistic variation and change through a social perspective in the wider Gulf region. He (1964, pp. 25–28) found that Jews and Christians use (k) and (q) invariantly, whereas Muslims alternate between [k] and [č] as reflexes of (k) as well as between [q], [k], [g], and [j] as reflexes of (q).

Abdel-Jawad (1981) studied the influence of social factors on (k) depalatalisation. His particular focus was on the use of (k) among three social groups in ʿAmmān: Bedouin, semi-Bedouin, and peasant speakers. Abdel-Jawad (1981) discovered that the majority of Bedouin and semi-Bedouin

speakers use [k] categorically. In contrast, almost half of peasant speakers used [k] categorically, while only two elderly females used [č] categorically. However, the remaining speakers varied in their use of [k] and [č]. The last group could be subdivided into those who used [k] almost categorically, and those who used [k] and [č] in varied degrees. Speakers who had a high percentage of [č] tended to be elderly men and women who had limited social networks and who were either uneducated or had minimal education. Abdel-Jawad (1981) did not explain why some speakers are categorical.

A more recent study in Jordan was conducted by Herin & al-Wer (2013), who investigated the dialect of as-Salt, which is located in the vicinity of ‘Ammān. Among speakers of non-Palestinian origin, it has been noted that alternations between [č] and [k] are found primarily in the speech of elderly speakers who are least mobile. The remaining speakers primarily use [k].

In Qatar, al-Amadidhi (1985) studied (g) palatalisation within four social groups: Bedouins, Qabā’il (tribal), Hwila, and ‘Ajam (of Persian origin). Bedouins were found to only rarely exhibit the feature of (g) palatalisation. In contrast, the remaining social groups, all of which are sedentary, regularly palatalised (g). This finding is supported by al-Muhannadi (1991) who further looked into the influence of age and education on the depalatalisation of (g) and (k) in the speech of women in Qatar. She found that the younger and more educated the participants, the more likely they were to depalatalise.

In Saudi Arabia, il-Hazmy (1975) studied the geographical distribution of (k) and (g) within sedentary, Bedouin, and semi-Bedouin speakers of the Ḥarb tribe. He found the distribution of variants to be largely affected by location and types of social ties. In particular, he found that those living in the central northern parts of Saudi Arabia produced the palatalised variants [ć] and [dz], whereas those living in the Ḥijāz were reported not to exhibit palatalisation, except for those with especially strong social ties with the northern central group. Examples of this latter group are the Rubuga, and the Misacila of the Banu ‘Amr in Wādī al-Furū‘, and the Sihliyyah of the Banī ‘Awf in Wādī an-Nagī‘ of Madina.

Another study in Saudi Arabia was carried out by Alessa (2008), who examined alternations between [k] and [ć], as well as between [g] and [dz], in the speech of Najdīs living in Jeddah. Her findings indicate that palatalisation is in an extremely recessive state. The very few palatalised variants were mainly found in the speech of elderly speakers who had little contact with local Ḥijāzīs.

One additional Saudi-based study was carried out by al-Rojaie (2013), who looked at the social motivators of word-stem (k) depalatalisation in the Qaṣīmi dialect, central Saudi Arabia. He found the change towards the assumed to be developing supra-local variant [k] to be perpetuated by educated young and middle-aged females. On the other hand, the local variant [ć] was preserved by non-educated elderly speakers of both genders.

Research that is particularly relevant to the current study includes investigations in Bahrain by Holes (1987) and al-Qouz (2009). Their studies cover a social and linguistic context resembling that of al-ʿAḥsāʾ in many aspects. In fact, as mentioned in section 2.1, the term *Baḥrayn*, was used in ancient times to refer to the large area covering the east Arabian Gulf, including both present-day Bahrain and al-ʿAḥsāʾ. In addition, both al-ʿAḥsāʾ and Bahrain have been exposed to successive influxes of Najdī migrants. They both have the same sectarian division of Sunnis and Shiites, with Sunnis being the predominant ruling group. More detailed description of these studies will be given below.

Holes' (1987) study took place in Bahrain, which for many years had a sectarian segregation system, and which has more recently undergone rapid modernisation changes that placed Sunnis and Shiites on equal footing. Consequently, in the modern context, both groups face linguistic assimilation pressures. Holes investigated the social distribution of phonemic, morphophonemic, and syllabic patterns in Bahraini communities. He focused on a number of linguistic variables in relation to three social factors: socio-sectarian affiliation (Sunnis/Shiites), literacy (literate/illiterate), and region (town/village). Among the linguistic processes he examined was the 'standardisation' of (q)¹³ and (k). Rather than the depalatalisation of [j] to [g], the standardisation of (q) entails the change from the local variants [g], [j], and [ḳ] (i.e. a slightly more fronted voiceless stop than the uvular [q] of

¹³ Holes (1987, p. 34) uses (q) merely as a symbol for the ancestor of, for example, the initial consonant of *gāl* (Sunnis) or *kāl* (Shiite villagers) 'he said' without presuming any diachronic reconstruction hypothesis.

Modern Standard Arabic), to the Modern Standard Arabic [q]. The standardisation of (k), on the other hand, refers to (k) depalatalisation, i.e. the shift from [č] to [k].

Holes (1987) found the local variants of (q) to be socially stratified. The (q) variable was dialectally realised as [g] or [j] among Sunnis, as [g] or [k] among Shiite village-dwellers, and as [g] among urban Shiites. Holes (1987) noted three types of words in the Bahraini dialect related to this variable. First, neologisms exist for which there are no clear dialectal equivalents, in which Modern Standard Arabic (q) is realised as [q] or [G], or occasionally as [ɣ] (Holes, 1987, p. 35). An example of a neologism is *muqābala* ~ *mugābala* ‘meeting’ (Holes, 1987, p. 36). Second, there are words only realised with the dialectal variants [g], [j], and [k], i.e. those that are not normally realised with [q], such as *ħagg* ‘towards, for, to’ (Holes, 1987, pp. 49–51). This group includes the majority of dialectal ‘core items’, meaning those which are deeply rooted into the dialect to the point where they would only very rarely be replaced with [q], e.g. *gām* ‘to get up’. This also includes borrowings, e.g. *gazzar* ‘to spend time’ (Persian), and archaisms, which are common in the local dialect but rare in Old Arabic, e.g. *bāg* < Old Arabic *bāqa* ‘to steal’ (cf. Holes, 1987, p. 50). Additionally, the second group encompasses words that have no morpho-semantic congruity with Modern Standard Arabic, i.e. words with similar surface phonological forms and an identical etymology in both the local dialect and Modern Standard Arabic, but which have different underlying meanings in each variety. Examples of such lexical items are the Bahraini words *ħalg* ‘mouth’ and *riyūg* ‘breakfast’,

which correspond to the Modern Standard Arabic words *ḥalq* ‘throat’, *ruyūq* ‘spittle’ respectively (Holes, 1987, p. 50). Third, there are words exhibiting variation between [q] and dialectal variants such as *ṣadīq* ~ *ṣadīg* ~ *ṣadīk* ~ *ṣadīj* ‘a friend’ (Holes, 1987, pp. 49–57). This type of variation is largely dependent on the presence of morpho-semantic congruity with Modern Standard Arabic, e.g. *bāgi* ~ *bāqi* ‘remainder’ (Holes, 1987, pp. 50–56).

Holes examined the replacement of dialectal variants as a whole with [q] in words exhibiting morpho-semantic congruity with Modern Standard Arabic. Among the literates, Holes (1987, pp. 69–70) found the local variants [j] and [k], which are markers of social background, to be largely disappearing in favour of [q]. However, [g] showed stronger avoidance of change, perhaps because it is more common and shared by all social groups (Holes, 1987, pp. 69–70). Holes (1987, p. 69) found that Shiite villagers were particularly likely to standardise the localised variants and that Sunnis were the least likely to standardise them, while urban Shiites holding an intermediate position between the two. Since Sunnis are the dominant social group, they feel least obliged to alter their speech towards the standard. Shiite village inhabitants, on the other hand, by opting for the standardised variant, seem to be overcompensating for their perceived lack of equivalency with both the Sunnis and the urban Shiites.

The use of the [č] variant was exhibited by all social groups, although its distribution across lexical items was found to be affected by both sect and settlement type. In terms of palatalisation processes, local core words that

have no obvious Modern Standard Arabic analogues were categorically palatalised, e.g. *čīđi* ‘like this or so’, and *čaffās* ‘to fold up’. Depalatalisation was mostly occurring in words that have clear morpho-semantic analogues in Modern Standard Arabic, e.g. *čēf* ‘how’ (Modern Standard Arabic *kayf*), *čadđāb* ‘liar’ (Modern Standard Arabic *kađđāb*). Within these words, the local status of the word played a significant role in either perpetuating or inhibiting standardisation. If a lexical item was palatalised by all Bahraini groups, palatalisation was more likely to be preserved. For example, the word *čāđib* ‘liar’ (Modern Standard Arabic *kāđib*) is palatalised by both Sunnis and Shiites. As such, it is more likely to remain palatalised. Within non-shared items, literate village Shiites appeared to be the most likely to depalatalise (k); Sunnis the least likely to do so. Non-shared items are those where palatalisation is not equally manifested across the lexical items of all social groups, e.g. the lexical item *čammal* ‘he completed’ (Modern Standard Arabic *kammal*) is palatalised by Sunnis only, whereas the word *ʾačal* ‘he ate’ (Modern Standard Arabic *ʾakal*) is only palatalised by Shiite village-dwellers.

Almost twenty years later, al-Qouz (2009) conducted another study in al-Manama, the capital city of Bahrain, in which she investigated a number of variables in the speech of male and female Sunni and Shiites school students aged 6–17. Her aim was to provide real-time evidence of changes in the dialect in light of Holes’ (1987) previous findings. As such, she examined patterns of linguistic variation in relation to class (upper, middle, or lower), age (6–8, 9–11, 12–14, or 15–17), type of school (state vs. private), and gender (male vs. female). With regards to the (g) variable, she found Sunnis

to be categorically using the heritage [j] variant in a limited set of lexical items, e.g. *rəjij* ‘delicate’, *trij* ‘road or way’. Meanwhile, Shiites demonstrated a variable behaviour. The heritage [g] variant was preserved among lower class males of ages 6–8 who go to state schools. Adoption of the Sunni [j] variant, on the other hand, was advanced by upper and middle class females aged 9–17 who go to private schools. According to al-Qouz (2009), a case of change over time seems to be taking place with Shiites. First stage children aged 6–8 almost categorically use the [g] variant. At the second stage (9–11), children start to use the [j] variant. By the third stage, the [g] variant drops considerably. This suggests that children apparently spend the first two stages of school trying to identify the set of lexical items in which palatalisation occurs.

To conclude, sociolinguistic studies of palatalisation in Arabic seem to indicate that it is becoming regressive in many dialects. Broadly speaking, the distribution of palatalisation is potentially influenced by any or all of: geographical location, settlement type (i.e. city vs. village), religious or sectarian denomination, origin of social group, social network, contact, class, type of school, education, age, and gender.

6.3 Word-stem depalatalisation data

In this section the variants included in the present analysis and the contexts in which they alternate will be specified (section 6.3.1), after which a description of how the coding schema for each factor group was developed will be given (section 6.3.2.).

6.3.1 Circumscribing variable context

In this section, the variants included in the analysis will be specified. The reasons will be given for the decision to eliminate some variants, as well as some categorical lexical items and categorical speakers.

In the Arabic dialect of al-ʿAḥsāʿ, the (k) variable may be realised as [k], [č], or [š]. Also, the reflexes of Old Arabic (q) may be [q], [ɣ], [g], or [j]. In this study, and in relation to (q), only the colloquial variants [g] and [j] will be examined. In informal observation, I have noticed that the palatalised variant [š] tends to occur in an extremely limited set of lexical items where it also alternates with [č] and [k], e.g. *kān* ~ *čān* ~ *šān* ‘was’ (see Table C1 in Appendix C for more examples). Alternations between [č] and [k] as well as between [j] and [g] tend to occur in comparatively larger sets of lexical items, e.g. *čatif* ~ *katif* ‘shoulder’, *kammal* ~ *čammal* ‘to finish’, *šidīg* ~ *šidīj* ‘friend’, *ballag* ~ *ballaj* ‘to stare’ and *giddām* ~ *jiddām* ‘in front of’ (for more examples see Table C2 for the [k] and [č] alternations and Table C3 for the [g] and [j] alternations in Appendix C).

Another set of lexical items, in which palatalisation never occurred in the present corpus of al-ʿAḥsāʿ Arabic, was found. These include lexical items borrowed from other languages, e.g. *kart* ~ **čart* ‘card’ (English), *kufta* ~ **čufta* ‘pounded meat’ (Urdu and Persian), *dōšag* ~ **dōšaj* ‘mattress’ (Urdu, and *šangal* ~ **šanjal* ‘chain’ (French). Some are taken from Modern Standard Arabic, e.g. *kitab* ~ **čitab* ‘he wrote’, *ḥikma/ḥakīm* ~ **hičma/hačim* ‘wisdom/wise’, *šakwa* ~ **šačwa* ‘complaint’, *nagil* ~ **najil* ‘transference’,

and *wagt* ~ **wajt* ‘time’. Others can be considered as core dialectal items, e.g. *kišša* ~ **čišša* ‘uncombed and matted’, *akūd* ~ **ačūd* ‘probably’, *mgašmal* ~ **mjašmal* ‘short clothes that are supposed to be longer’, and *gazzar* ~ **jazzar* ‘he spent time’. There are also some examples which show that palatalisation is restricted around emphatics (cf. Johnstone, 1963, p. 220), e.g. *nakkat* ~ **naččat* ‘he joked’, *taḥakkam* ~ *taḥaččam* ‘he controlled’, *ḥagg* ~ **ḥajj* ‘belongs to’, and *waggat* ~ **wajjat* ‘he timed’. See Tables C4 and C5 in Appendix C for more examples of the lack of palatalisation in (k) and (g) respectively. As mentioned earlier, similar cases of categorical items have been noted by Johnstone (1963, p. 219), in his study of the dialects of the Arabian Peninsula and Iraq.

Milroy (1980) acknowledged the methodological difficulties involved in determining the membership of phonolexical sets, explaining that “the total membership of [a] set cannot be predicted on phonological grounds, nor do speakers themselves have reliable intuitions” (p. 118). This applies to the current data, where palatalisation is not necessarily obliged to occur in contiguity of front vowel environments (see 6.4.1 and 6.4.2). Requiring speakers to assign words into lexical sets does not seem useful, especially given that the phenomenon under investigation is recessive and that speakers, who belong to different social groups, vary greatly in terms of their use. Moreover, it seems impractical to provide a comprehensive list of all the words that have (g) or (k) in the local dialect and to then ask each participant to classify every one of them. Such lists would be excessively long and require excessively lengthy interviews. The interviews already consisted of

three stages: taking demographic information, having conversations, and doing picture elicitation tasks. Adding the task of classifying long lists of lexical items is therefore completely unfeasible, because it is laborious and will create a very heavy burden on participants, as well as lowering the likelihood of interview participation or completion. Hence, in the present study, only items that alternated in the corpus (i.e. non-categorical items) were included in the analysis (see Tables C1, C2, and C3 in Appendix C). This brings up another type of words, namely those which are categorically palatalised. Holes (1987, p. 57) observed such words with the (k) variable, which he eliminated to include only the lexical items that were replaceable by the standard [k] variant. In the present study, I encountered only two such lexical items. The first of these items is *yančib* ‘to pour rice’. This word was articulated with the [k] variant only once during an interview. Other speakers, who were present during this interview, tried to correct the speaker who produced it saying that it should never be pronounced with [k]. As such, all instances of this word and its derivations were eliminated from analysis. The second lexical item is *čazza* ‘unfriendly or unlikable’. This word occurred several times during interviews, however none of these occurrences was with the [k] variant. All tokens of this word and its derivation were therefore also removed from analysis.

With regards to the [q] variant, in the present corpus of al-ʿAḥsāʿ Arabic this variant is either used when speakers move to the most standard style and use Modern Standard Arabic, or when they use a set of local words that are borrowed from Modern Standard Arabic. Within these contexts, the

[q] variant is interchangeable with [ɣ] for some speakers. Tokens of such alternations were very few, and as such it was not possible to include them in the analysis. A list of words featuring the [q] variant in the local dialect are given in Table C6 in Appendix C. As can be seen, most of these words are borrowed from Modern Standard Arabic. Some of them are official or formal terms, e.g. *qāḍi* ‘judge’, *tarqiya* ‘job promotion’, *muqābala* ‘interview’, *qarḍ* ‘loan’. Others are religious, e.g. *qanat* ‘he prayed’, *qurʾān* ‘Quran’, ‘*aqīda*’ ‘doctrine’, *fiqh* ‘islamic code of conduct’. In addition, some of the words are commonly used in the media, such as *ḥalqa* ‘episode’, *istiqrār* ‘stability’, *ḥaqāfa* ‘culture’, or *istiqlāliyya* ‘independence’.

Alternations between [q] and [ɣ] in local words that are aligned with Modern Standard Arabic should be distinguished from the types of alternations found in Persian loan words like *qarša* ~ *yarša* ‘bottle’, *qūri* ~ *γūri* ‘kettle’. In the Persian language, the Arabic orthographical symbols < ġ > and < ق >, denoting the Arabic phonemes /ɣ/ and /q/ respectively, are used to represent the voiced uvular stop [G]. This might have led to confusion among Arabic speakers as to whether or not Persian loan words should be pronounced with [ɣ] or [q], which is the closest sound to [G] in the local dialect. Again, the number of tokens obtained for these words is very small. Therefore, words of this sort were eliminated from analysis.

Another issue that needs to be discussed is the existence of categorical speakers in the data. Due to the regressive nature of the variables under investigation, many of the speakers were found to be categorical, i.e. they

produced the application values [k] and [g] 100% of the time. These kinds of speakers are considered knockouts and are typically eliminated from analysis (see section 5.1.2.1. for more details). In Tables 7 and 8 are a specification of the numbers of categorical speakers in the (k) and (g) variables respectively according to socio-sectarian affiliation, age/education, and gender. There were 37 categorical speakers who only produced the [k] variant: 26 Sunnis (70.2%) and 11 Shiites (29.7%). The largest number of categorical speakers was found among adolescents and young Sunnis; i.e. 18 speakers (48.6%). There were no non-educated categorical speakers of [k]. The high rate of categorical speakers found among adolescents and young Sunnis supports the view expressed by Labov (2007) on linguistic transmission. This perspective states that, among younger speakers, inherited linguistic variables tend to become subject to regularisation and homogenisation processes towards innovative forms.

Table 7 Categorical speakers of the (k) variable in words stems

S Sunni	Adolescent & young		Middle-aged		Educated/elderly		Non-educated/elderly		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Men	10	27	2	5.4	1	2.7	0	0	13	35.1
Women	8	21.6	5	13.5	0	0	0	0	13	35.1
Total	18	48.6	7	18.9	1	2.7	0	0	26	70.2
S Shiite	Adolescent & young		Middle-aged		Educated/elderly		Non-educated/elderly		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Men	2	5.4	1	2.7	1	2.7	0	0	4	10.8
Women	6	16.2	1	2.7	0	0	0	0	7	18.9
Total	8	21.6	2	5.4	1	2.7	0	0	11	29.7
Grand total 37										

Regarding the (g) variable, 30 speakers used the [g] variant categorically in the data. Among these there were 28 Sunnis (93.3%) and only two Shiites (6.6%). Among Sunnis, there were 18 adolescents and young categorical speakers (60%). No non-educated/elderly categorical speakers were found either among Sunnis or Shiites. The high percentage of adolescents and young Sunni speakers in the use of (g) is in agreement with the notion of linguistic transmission, which holds that variable forms undergo a unification process in which innovative forms are selected by younger generations (Labov, 2007).

Table 8 Categorical speakers of the (g) variable

Sunnis	Adolescent & young		Middle-aged		Educated/elderly		Non-educated/elderly		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Male	8	26.7	3	10	2	6.6	0	0	13	43.3
Femalen	10	33.3	5	16.7	0	0	0	0	15	50
Total	18	60	8	26.7	2	6.6	0	0	28	93.3
Shiite	Adolescent & young		Middle-aged		Educated/elderly		Non-educated/elderly		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Male	0	0	0	0	0	0	0	0	0	0
Femalen	1	3.3	1	3.3	0	0	0	0	2	6.6
Total	1	3.3	1	3.3	0	0	0	0	2	6.6
Grand total 30										

Figure 6 presents a graphical comparison of categorical speakers, i.e. those who only use depalatalised variants, across the (k) and (g) variables. As can be seen, there are 17 speakers, who are categorical with (k) only (35.4%),

and 12 speakers, who are categorical only with (g) (25%). This contrasts with the 19 categorical speakers found for both (k) and (g) (49.6%). The latter group, consisting of categorical speakers across the (k) and (g) variables, may be described as leaders of linguistic change.

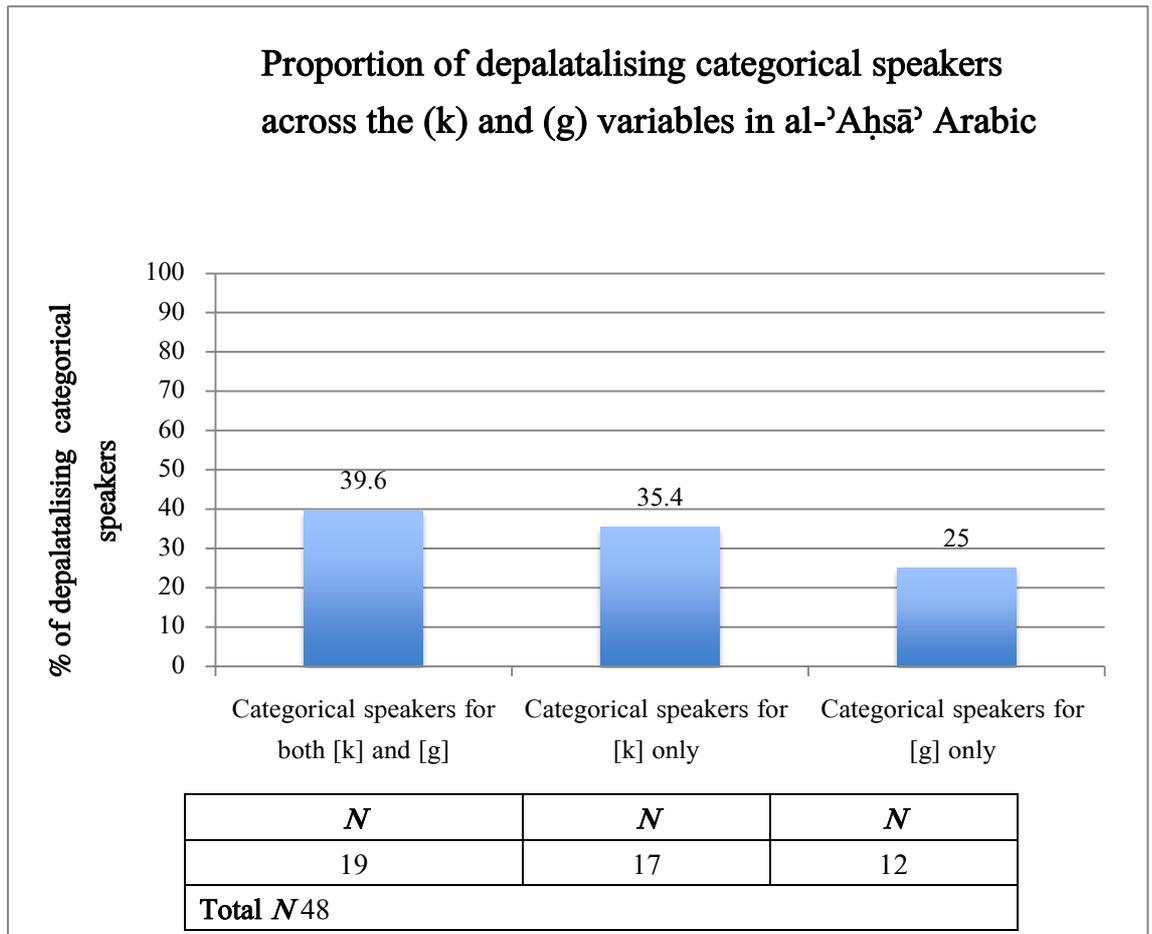


Figure 6 Overall distribution of depalatalising categorical speakers across (k) and (g) in al-ʿAḥsāʾ Arabic

6.3.2 Coding

Doing mixed-effects analysis using Rbrul requires the coding of discrete or continuous variants for the dependent linguistic variable, as well as for the independent linguistic and social factors. The dependent variables (k) and (g)

involve binary discrete variants that can be easily determined aurally. The (k) variable may be realised as [k], [č], or [š]. As will be seen below, there were only very few tokens of [š] and, as such, they were conflated with [č]; both will be represented as [č] in the analysis. The variants of (g) are coded as [g] and [j]. As stated in section 5.1.2.3, many social factors were originally considered in the analysis of (k) and (g), as well as the other variables. Some factors examined were found to exhibit patterns of interactions, overlaps and non-orthogonality. Accordingly, models were adjusted and compared to find the best fit of the data. Eventually, five factors were selected for examination: age/education (adolescent & young, middle-aged, educated/elderly, and non-educated elderly), socio-sectarian affiliation (Sunnis vs. Shiites), gender (male vs. female), phonetic environment (high front environment vs. elsewhere), and style (conversation vs. picture elicitation task). Cross tabulations as well as mixed-effects results showed that adolescent and young speakers act alike. As such, they were conflated into one group. By comparing the model with the conflation against the model with the split, which was managed through the use of the model comparison formula (cf. Paolillo, 2002, pp. 140–141; Tagliamonte, 2006, p. 149), it was found that the model with the least number of parameters provides a better fit of the data. For this reason, the adolescent and young groups were conflated.

6.4 Results

Within this section, the results of (k) depalatalisation in word stems will be presented first (section 6.4.1), followed by (g) depalatalisation (section 6.4.2).

Within each variable, overall distributional and mixed-effects analyses will be given.

6.4.1 The (k) variable in word stems

The results generally show that (k) depalatalisation is widespread in the Arabic dialect of al-ʿAḥsāʾ. It is mainly stratified by age/education, and is clearly asymmetric in relation to Sunnis and Shiites. Interesting differences between males and females are also observed.

A total number of 2306 tokens was provided by both categorical and non-categorical speakers. After removing categorical speakers, the remaining data set amounted to 1396 tokens, which were analyzed using Rbrul (Jonson, 2009). In the following section, overall distributional and mixed-effects analyses will be provided.

6.4.1.1 Overall distribution of (k) in word stems

The overall percentage of each variant is given in this section, irrespective of independent factors. Figure 7 displays the proportion of (k) among all speakers, including categorical ones. The figure exhibits a clearly variable behaviour, with the majority of the tokens realised as [k] (70.9%), and less than a third of the tokens realised as [č] (27.9%). Realisations of [š] comprise a minority of tokens (1.2%).

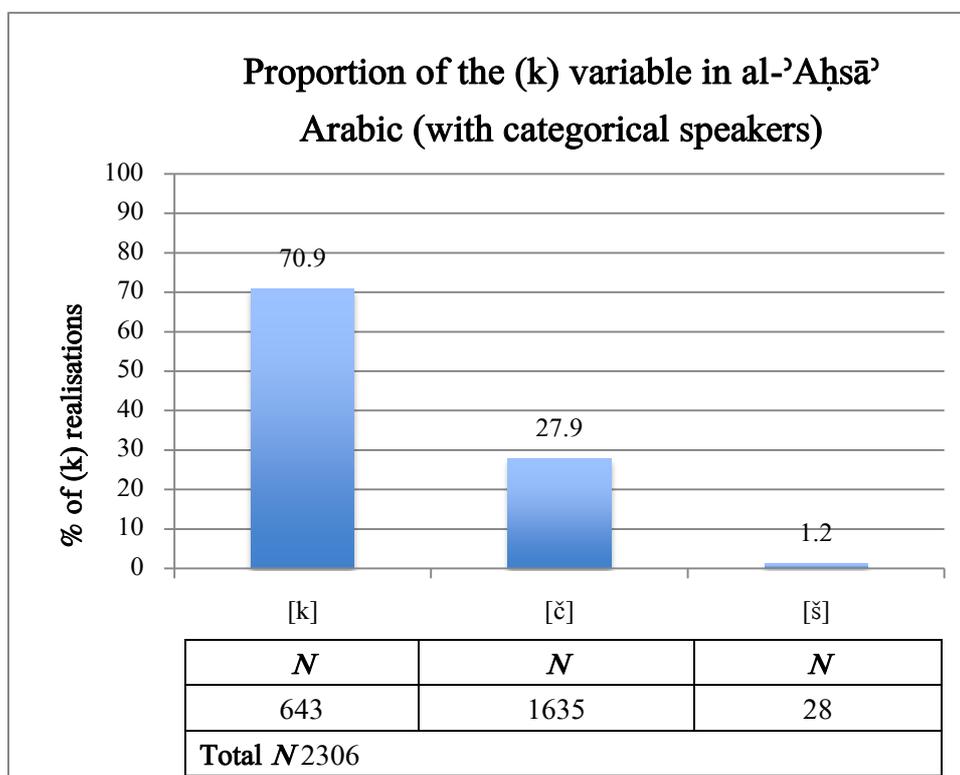


Figure 7 Overall distribution of (k) in word stems in al-ʿAḥsāʾ Arabic (with categorical speakers)

Figure 8 shows the distribution of (k) after the removal of categorical speakers. These findings are broadly parallel to those obtained when all speakers were included, although a decrease can be observed in the use of [k] from 70.9% to 59.1%, accompanied by an increase in the use of [č] from 27.9% to 39.6%. Realisations of [š] rise slightly, from 1.2% with all speakers to 1.3% among non-categorical speakers. Given the low number of [š] tokens, i.e. only 18, they were conflated with tokens of [č]. The high percentage of [k] realisations shows that (k) depalatalisation is common in al-ʿAḥsāʾ Arabic. Nonetheless, its use is not as advanced as it is in the speech of Qaṣīmī speakers (al-Rojaie, 2013) and Najdī speakers in Jeddah (Alessa, 2008), despite appearing to be more advanced than the usage observed in other places in the Gulf, such as Bahrain (al-Qouz, 2009; Holes, 1987) and Qatar

(al-Muhammad, 1991). It should be noted that generalizations must be considered with caution, given that these studies were conducted over markedly different periods of time.

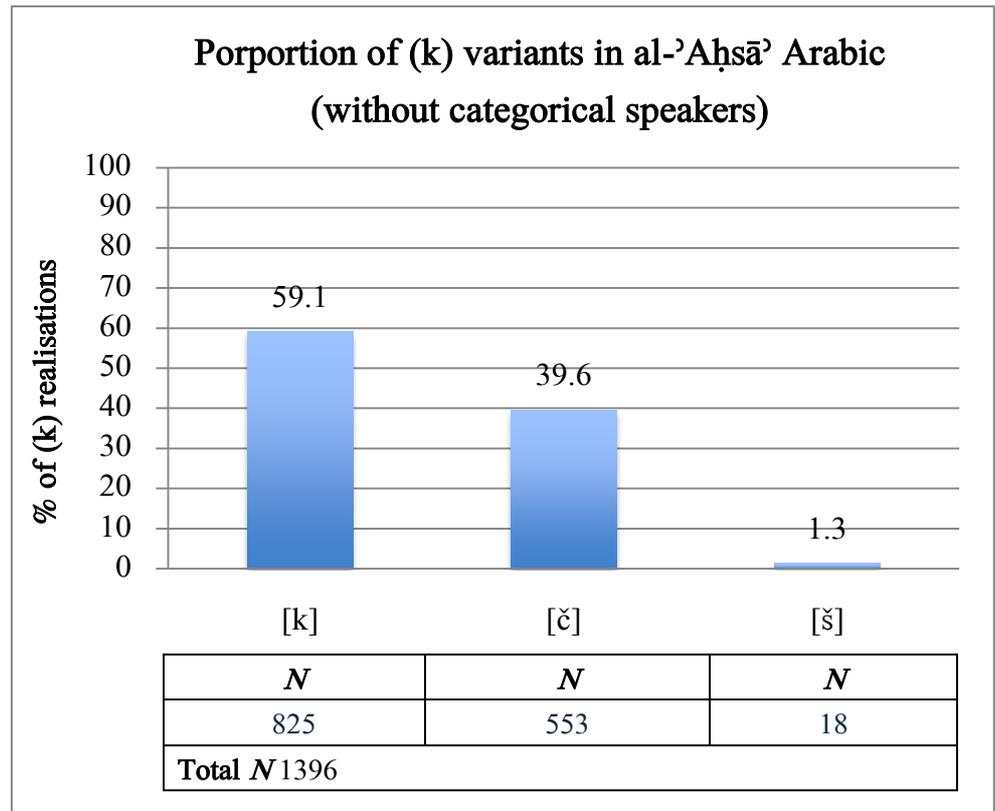


Figure 8 Overall distribution of (k) in word stems in al-'Aḥsā' Arabic (without categorical speakers)

6.4.1.2 Mixed-effects analysis of (k) in word stems

Mixed-effects results of factors influencing (k) depalatalisation in word stems are given in Table 9, which is shown at the end of this section. The [k] variant is considered as the application value. The results show that all of the social factors tested are significant. The highest ranked factor is age/education ($p = 2.63e-08$), wherein adolescent & young (1.323 log odds) and middle-aged (0.479 log odds) speakers are demonstrated as being more likely to produce (k) depalatalisation, and educated (-0.396 log odds) and non-educated

elderly speakers (-1.406 log odds) are less likely to depalatalise (k) in word stems. This correlates with the findings of extant literature, as age and/or education have been reported to play a significant role in advancing depalatalisation in many other Arabic contexts, e.g. in ‘Ammān (Abdel-Jawad, 1981), Qatar (al-Muhannadi, 1991), Bahrain (Holes, 1987) Qaṣīm (al-Rojaie, 2013), and among Najdī speakers in Jeddah (Alessa, 2008).

The second most significant factor is socio-sectarian affiliation ($p = 0.000329$), within which Sunnis (0.588 log odds) display a high level of (k) depalatalisation usage in comparison to Shiites (-0.588). This form of dialect divergence is consistent with expectations, as Sunnis share the same socio-sectarian affiliation background with the majority of Saudis; this divergence does not apply to Shiites, who constitute a minority in Saudi Arabia (see section 7.4.1.2 for a discussion on the diffusion of depalatalisation into al-‘Aḥsā’ Arabic). In relation to previous studies, the existence of a socio-religious-based linguistic divide in the use of (k) in word stems is also found in Iraq, where Muslims palatalise (k), whereas Christians and Jews do not (Blanc, 1964, pp. 25–28). In Bahrain, (k) word-stem palatalisation in itself is present equally among all Bahraini groups, i.e. urban Sunnis, urban Shiites, and Shiite village-dwellers (see section 6.2.1). The difference between these groups lies in the range of lexical items chosen to be palatalised. Depalatalisation processes in Bahrain have been found to be accelerated in non-shared lexical items, especially those used by literate Shiite village inhabitants (Holes, 1987).

The results found in al-ʿAḥsāʾ today are unlike those found in Bahrain almost 36 years ago. Nevertheless, present findings illustrate that elderly speakers of both socio-sectarian groups in al-ʿAḥsāʾ show a stronger resemblance than other age groups. This might be suggestive of the existence of previous patterns of long-term convergence, now replaced by divergence processes. As discussed in section 4.3.4, linguistic convergence entails an increase in terms of the similarities between dialects, whereas divergence involves a decrease of similarities (Auer et al., 2005). In light of present findings, there seems to be a state of linguistic divergence between Sunnis and Shiites. Sunnis are modifying their speech patterns to match the new supra-local variant [k] associated with national identity much faster than Shiites, who are more conservative and attached to local patterns of speech associated with a local social identity.

Finally, the least significant factor group is gender ($p = 0.0125$). Females (0.381 log odds) produced (k) depalatalisation more than males (-0.381 log odds). The findings here replicate those obtained by al-Rojaie (2013) in his study of Qaṣīmī Arabic. One particularly surprising finding is that (k) palatalisation in the word stem is not suppressed in picture elicitation tasks. This suggests that while it should be considered an indicator because it designates social background, this palatalization is not overtly recognised as being associated with a lower status. Another factor not selected as significant is phonetic environment. According to Labov (2007), linguistic diffusion generally involves weakening of internal constraints. This would mean that the diminished influence of phonetic environment on palatalisation is normal,

given the recessive state of (k) palatalisation in the word stem in al-ʿAḥsāʿ Arabic.

Table 9 Mixed-effects results of (k) in word stems

Total 1396	N	Deviance 1508.255	df 7	Grand mean 0.591	
Individual Speaker Standard Deviation 0.891					
Factor group	Factors	Log odds	N	Proportion of application value	Centred factor weight
Age/education p = 2.63e-08	Adolescent & young	1.323	413	0.799	0.79
	Middle-aged	0.479	307	0.645	0.618
	Educated/elderly	-0.396	300	0.580	0.402
	Non-educated/elderly	-1.406	376	0.327	0.197
Socio-sectarian affiliation p = 0.000329	Sunni	0.588	569	0.691	0.643
	Shiite	-0.588	827	0.522	0.357
Gender p = 0.0125	Female	0.381	572	0.621	0.594
	Male	-0.381	824	0.570	0.406
Not selected as significant: Phonetic environment, and style					

6.4.2 The (g) variable

The results of (g) depalatalisation are broadly parallel to those found with (k) in word stems, except for the style variable. In general, (g) depalatalisation is widespread in the Arabic dialect of al-ʿAḥsāʿ and is constrained by age/education, socio-sectarian affiliation, gender, and style. Within this

section, overall distributional analysis of the data will be given, followed by the results of the mixed-effects analysis.

6.4.2.1 Overall distribution of (g)

The overall percentage of (g) realisations in the corpus of al-ʿAḥsāʾ (including categorical speakers) is summarised in Figure 9. Given the total number of 1401 tokens, it can be observed that (g) is realised as [g] the majority of the time (75.9%), as well as that [j] appears to be considerably less common (24.1%).

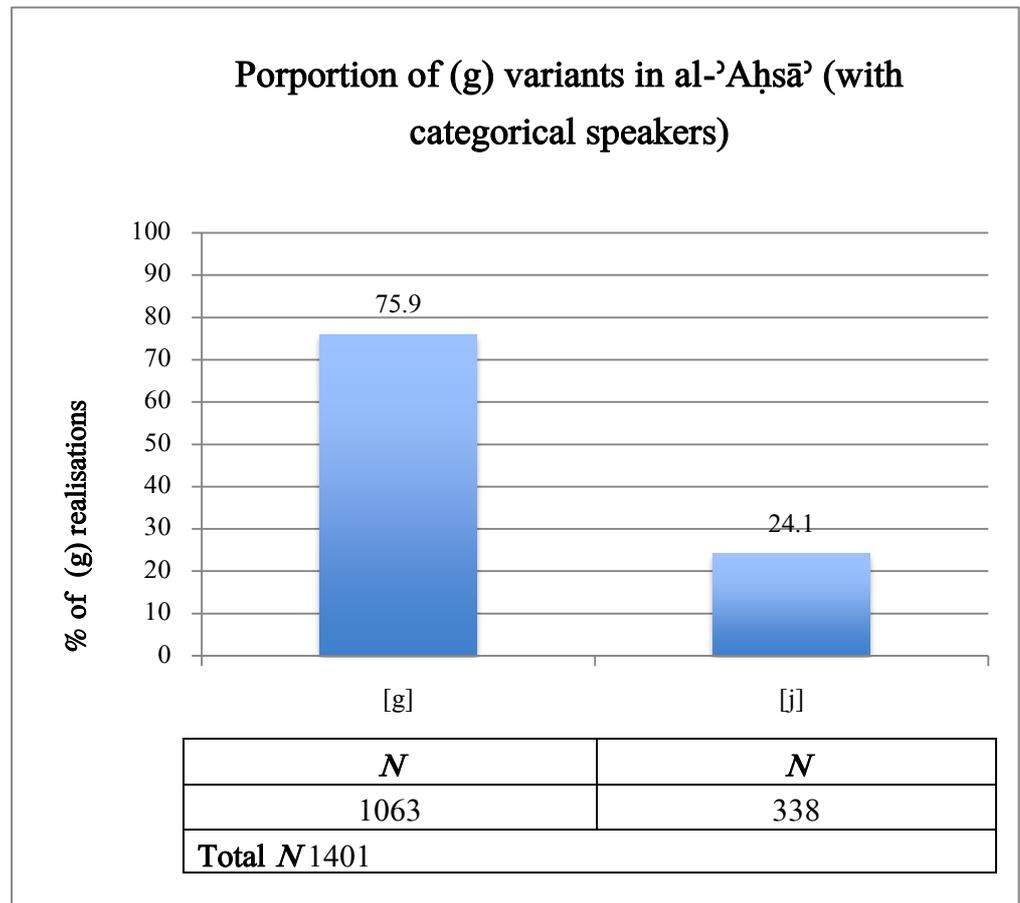


Figure 9 Overall distribution of (g) in al-ʿAḥsāʾ Arabic (with categorical speakers)

After the removal of categorical speakers, the total number of remaining tokens is 960. In comparison to the proportions provided by all speakers, i.e. 75.9% for [g] and 24.1% for [j], the percentages of (g) variants among non-categorical speakers are approaching each other, with [g] being realized 64.8% of the time and [j] having a realisation of 35.2% (see Figure 10).

As with the (k) variable, the depalatalisation of (g) in al-ʿAḥsāʾ seems to hold a more advanced position than is found in Gulf countries such as Bahrain (al-Qouz, 2009; Holes, 1987) and Qatar (al-Amadidhi, 1985; al-

Muhannadi, 1991). Within Saudi Arabia, it also lags behind the level found in the speech of Najdīs in Jeddah (Alessa, 2008). Again, these remarks need to be considered with an awareness of the differences in time between these studies.

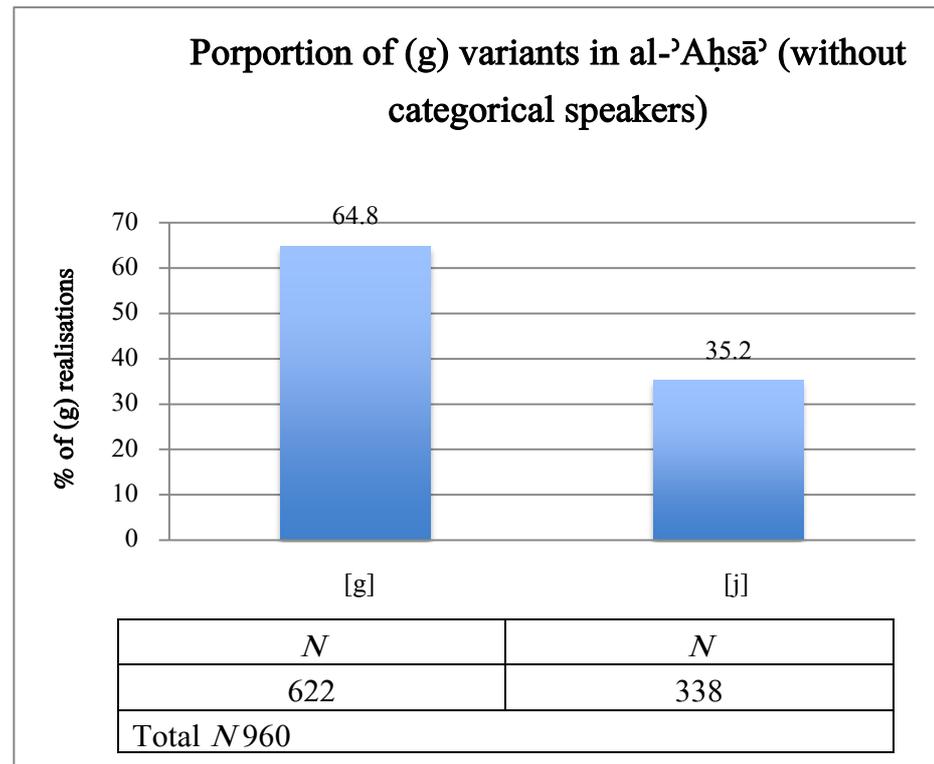


Figure 10 Overall distribution of (g) in al-'Aḥsā' Arabic (without categorical speakers)

6.4.2.2 Mixed-effects analysis of (g)

The multivariate analysis of (g) in al-'Aḥsā' Arabic with [g] as the application value is illustrated below (see Table 10). Four factors were selected as being significant: age/education, style, socio-sectarian affiliation, and gender. The greatest statistical significance was found with age/education ($p = 1.76e-11$).

In this area, adolescents & young speakers produced the highest amount of (g) depalatalisation (0.965 log odds), while both middle-aged (0.135 log

odd,), and educated/elderly (0.008 log odds) speakers produced the lowest amount of depalatalisation. The least amount of (g) depalatalisation was found among non-educated/elderly speakers (-1.107 log odds, 32.7%). This supports the findings of al-Muhammadī (1991), who investigated the use of (g) in women speech in Qatar. She found (g) depalatalisation to be advanced among young and educated speakers. Parallel results were also found with Alessa (2008), who examined alternations between [g] and [dz] in the speech of Najdīs living in Jeddah. Her results showed that palatalised forms were mainly found within the the elderly age group.

The second-most significant predictor of (g) realisation is style ($p = 3.38e-07$). Participants significantly shifted in style to [g] as they moved from conversations (-0.467 log odds) to picture elicitation tasks (0.467 log odds), indicating a lower status attachment to [j]. Parallel stylistic shifts were not detected with the (k) variable. This means that [j] is more overtly stigmatised than [č]. According to Trudgill (1986, p. 11), overt stigmatisation entails an increased level of saliency attached to the linguistic variable involved. This indicates that (g) is more salient than (k). Perhaps this is due to the fact that the standard variant involved with (g), i. e. [q] differs from the vernacular prestigious variant [g]. With (k), the standard and the prestigious variants are both [k]. Indeed, many speakers mentioned that they consider [č] to be more agreeable than [j] (see quotes 1, 2, and 3 in Appendix B). The researcher also noted during interviews that the most prominent variant indicating shifts to Modern Standard is [q]. Similar findings were noted by Khatib (1988), who investigated the Arabic dialect of two social groups, the Ḥōrānīs and the

Fallāḥīn, in Irbid, Jordan. Khatib found the Ḥōrānīs to be using [q], [g], and [ʔ], whereas the Fallāḥīn used [q], [k], [g], and [ʔ]. He noted that (q) stylistically acted differently from all the other linguistic variables he investigated. He (1988) rationalised this by saying that (q) “is a very salient feature which seems to have attached to it a great deal of social awareness on the part of the Jordanian speech community as a whole” (p. 248). These results were similar to those of Abdel-Jawad (1981), who studied the use of (q) in the speech of Bedouin, semi-Bedouin, and peasant speakers in ‘Ammān, Jordan. He (1981, pp. 236–237) found the use of standard [q] to be typical of formal rather than informal styles.

It should be noted that it is surprising to have style as a second most significant factor, where it exceeds social stratifications in terms of socio-sectarian affiliation or gender, given that “[v]ariation on the style dimension within the speech of a single speaker derives from and echoes the variation which exists between speakers on the “social” dimension” (Bell, 1984, p. 151). A similar exceptional ‘hyperstyle’ variable can be seen in Modaresi’s (1978) Tehrani findings, which demonstrate a style shift of 94% accompanied by a maximum social differentiation of 17% (cf. Bell, 1984, pp. 154–156). Such radical style shifts occurred between free speech and reading style, which are considered as two “separate dimension[s] of language behaviour” (Bell, 1984, p. 156). The same rationale could be used to explain the non-gradient stylistic performance of the (g) variable in the present study, i.e. that the picture elicitation task is a different form of linguistic behaviour than conversations.

The third most significant factor in this analysis is socio-sectarian affiliation ($p = 0.000292$). Sunnis show a higher usage of (g) depalatalisation (0.384 log odds) than Shiites (-0.384 log odds). Again, a state of dialect divergence is present between Sunnis and Shiites. Sunnis adopt the supra-local variant [g] much faster than Shiites. The situation in al-ʿAḥsāʾ is different from that found in Bahrain. According to Holes (1987, p. 70), and in relation to dialectal ‘core’ items (see section 6.2.4), Sunni Bahrainis are marked for their variation between [j] and [g]. In contrast, most Shiite Bahrainis use [g], except for Shiite village-dwellers who variate between [k̄] and [g]. Holes (1987, p. 70) generally found the group markers [j] and [k̄] to be giving way to [g], the use of which is shared by all of the studied groups. Nevertheless, he did note that the Sunni [j] variant is still found in a few ‘frozen’ items, while [k̄] has almost completely disappeared from the speech of literate Shiite village-dwellers. This is likely because Sunnis are the dominant ruling group in Bahrain. In al-ʿAḥsāʾ, variation between [g] and [j] is shared by both Sunnis and Shiites, which means that [j] is not particularly a marker of Sunni speech. Also, as with (k), Sunnis in al-ʿAḥsāʾ tend to follow supra-local norms, in this case [g], because they are associated with the majority of the Sunni population in Saudi Arabia, as has been noted by some speakers in the present study (see quotes 4, 5, and 6 in Appendix B). No such strong motivation has been found among Shiites, who seem to prefer the preservation of the local vernacular [j] variant (see section 7.4.1.2 for a discussion on the diffusion of depalatalisation into al-ʿAḥsāʾ dialect).

The least significant predictor of (g) is gender ($p = 0.00881$), where a polarisation between females and males is found, females being more likely to produce (g) depalatalisation (0.249 log odds) than males (-0.249 log odds). Results here are similar to those obtained with the (k) variable.

Table 10 Mixed-effects results of (g)

Total N 960		Deviance 1068.185		df 8		Grand mean 0.648	
Individual speaker standard deviation 0.352							
Factor group	Factors	Log odds	N	Proportion of application value	Centred factor weight		
Age/education $p = 1.76e-11$	Adolescent & young	0.965	348	0.816	0.724		
	Middle-aged	0.135	177	0.655	0.534		
	Educated/ elderly	0.008	176	0.693	0.502		
	Non-educated/elderly	-1.107	259	0.386	0.249		
Style $p = 3.38e-07$	Picture elicitation	0.467	748	0.705	0.615		
	Conversation	-0.467	212	0.448	0.385		
Socio-sectarian affiliation $p = 0.000292$	Sunni	0.384	353	0.708	0.595		
	Shiite	-0.384	607	0.613	0.405		
Gender $p = 0.00881$	Female	0.249	410	0.651	0.562		
	Male	-0.249	550	0.645	0.438		
Not selected as significant: Phonetic environment							

6.5 Conclusion

The foregoing findings on (k) and (g) depalatalisation in the Arabic dialect of al-ʿAḥsāʾ demonstrate a form of ‘orderly heterogeneity’ (Weinreich et al., 1968). The variants [k] and [g] are found to be primarily correlated with social factors, such as age/education, socio-sectarian affiliation, and gender. Of all the attempts to explore internal constraints, only style was found to have an impact on only the (g) variable. Overall, social factors proved to be dominant in determining the choice of word-stem depalatalisation among participants.

In summary, depalatalisation of (g) is slightly more advanced than (k) in the speech of non-categorical speakers of al-ʿAḥsāʾ Arabic. The shift towards (k) depalatalisation is led by adolescent, young, and middle-aged Sunni females. Palatalisation of (k) is preserved among educated and non-educated elderly Shiite males. The (g) depalatalisation is adopted by adolescent, young, middle-aged, and educated elderly Sunni females, especially within the data obtained from the picture elicitation task. However, depalatalisation of (g) is less seen among non-educated elderly Shiite males, most notably within a conversational context. Findings on age and gender agree to a large extent with previous research, which have shown that younger females are more likely to be attached to prestige than older males and to have language use that reflects this (cf. al-Rojaie, 2013). Results related to socio-sectarian affiliation are within expected parameters, as Sunnis in al-ʿAḥsāʾ fit in well with the Sunni majority in Saudi Arabia and are therefore more inclined to

perpetuate the shift towards supra-local features than those of the Shiite minority. Unlike (k), (g) has been shown to have correlations with education and style. The discrepancies related to this suggest that (g) may be more stigmatised than (k).

Chapter 7 The 2nd person singular feminine object/possessive suffix (-ik)

7.1 Introduction

This chapter deals with the first of the two morphophonemic variables examined in this study, namely the 2nd person singular feminine object/possessive suffix (-ik). A morphophonemic variable is a structural unit in which the levels of morphology and phonology or phonetics interact. The study of morphophonemic variation therefore entails the analysis of alternations of sounds within morphemes. In relation to the 2nd person feminine suffix in al-³Aḥsā' Arabic, an examination will be provided of the synchronic alternations in the realisation of the consonantal element of this morpheme between [k], [č], and [š]. As reported in previous literature, [-a~i]š and [-(-a~i)č] are the local reflexes of the 2nd person singular feminine object/possessive suffix (-ik) in al-³Aḥsā' Arabic (cf. Holes, 1991, pp. 653–655; Prochazka, 1988, p. 126). It has also been claimed that some locally palatalised variants in Saudi Arabia are in the process of being replaced by the supra-local depalatalised [-i]k(i) form (cf. al-Azraqi, 2007; Alessa, 2008; al-Rojaie, 2013).

Reflexes of (-ik) will be examined in relation to social factors, such as socio-sectarian affiliation, age, and gender. Previous Arabic sociolinguistic studies suggest that (de)palatalisation in the suffix is socially stratified. Of particular relevance to the al-³Aḥsā' context is the linguistic divide found between Sunnis, who display a high usage of [-(-a~i)č], and Shiites, who

commonly use [-(a~i)š]. This divide has been noted in Bahrain, as well as having been reported as being the case in al-ʿAḥsāʾ (Holes, 1991, p. 655). Gender has also been reported to influence (k) depalatalisation in the suffix (cf. Alessa, 2008, pp. 173–174), as has also been observed with age (cf. al-Azraqi, 2007, p. 240; Alessa, 2008, pp. 161–171).

This chapter begins with a review of the history of this suffix in Semitic languages and Old Arabic (section 7.2.1). A discussion of the linguistic and semantic rationale behind the development of palatalisation in Arabic will then be provided (section 7.2.2). After this, the current geographical distribution of the different reflexes of the 2nd person feminine suffix in the Arabian Peninsula will be delineated, with a focus on where the linguistic diversity found in al-ʿAḥsāʾ Arabic stands in relation to other areas (section 7.2.3). Following this, the chapter will move onto an overview of the correspondence of (de)palatalisation processes with social factors in Arabic studies (section 7.2.4). Data for al-ʿAḥsāʾ Arabic will then be presented, after which variable context and coding schema will be described. The analysis was conducted over two stages: [-(a~i)č] against [-(a~i)š], and [-(i)k(i)] against both [-(a~i)č] and [-(a~i)š]. Three social factors were considered in the analysis, namely socio-sectarian affiliation (Sunni vs. Shiite), age (adolescent, young, middle-aged, or old), and gender (male vs. female). After this, a discussion will be provided of the overall distributional and multivariate results. The results generally show that depalatalisation of (-ik) in the 2nd person singular feminine object/possessive suffix is indeed starting to occur in the dialect of al-ʿAḥsāʾ. It is found to be socially stratified in terms of

socio-sectarian affiliation and age. Adolescent and middle-aged Sunnis of both genders have been found to typically use the supra-local variant [-(i)k(i)], whereas young and elderly speakers exhibit a strong maintenance of the local variants [-(a~i)č] and [-(a~i)š]. Young speakers are mainly university students who, by using the local variant, are apparently trying to distinguish themselves amidst other students from different areas of al-ʿAḥsāʾ and beyond in Saudi Arabia. The present findings are suggestive of a change in progress typically found in dialect levelling situations, wherein local variants are giving way to variants diffusing from major urban centres. Overlapping with this variation is another type of stable variation found in the use of the palatalised variants [-(a~i)č] and [-(a~i)š]. Middle-aged and young Sunnis show the highest approximation to the [-(a~i)č] variant; whereas adolescent and elderly Shiites of both genders maintain the [-(a~i)š] variant. The rise of middle-aged and young groups over peripheral age groups (in this context, adolescent and elderly speakers) is common in stable age-graded variation contexts.

7.2 Review of previous studies

In this section, an account of the different realisations of the 2nd person singular object/possessive pronoun in languages belonging to the Semitic family will be given from both a historical and synchronic perspective. Due to its purely phonological nature, it was possible to discuss the variable examined in the previous chapter – (k) in word stems – in the context of languages unrelated to Arabic that exhibit similar alternations. In contrast, with the 2nd person singular object/possessive suffix, in which phonological

alternations take place within the morpheme, the review of previous studies is necessarily limited to languages descending from the same ancestor, namely the Afro-Asiatic and Semitic languages.

Palatalisation of /k/ in the 2nd person singular feminine suffix received considerably more attention from medieval Arab grammarians than the same process in word stems. This may have been because it was more prevalent in the suffix. As such, a review of the linguistic and semantic motivators of palatalisation in the suffix will necessarily include the perspectives of medieval Arab grammarians, in addition to the findings of present-day researchers. Thereafter, previously identified associations between social factors and (de)palatalisation of (k) in the suffix will be given.

7.2.1 Suffix (de)palatalisation in Arabic and other languages

In many ancient Afro-Asiatic and Semitic languages, the 2nd person singular object/possessive pronoun is realised with the voiceless velar stop /k/ for both the feminine and the masculine. Feminine and masculine distinctions are often marked by differences in the presence or quality of the following vowel; mostly with a high front vowel for the feminine, and a low front vowel for the masculine. For instance, in Akkadian, the feminine suffix is *-ki*; whereas the masculine is *-ka* (Buccellati, 1997, p. 84). In eastern Canaanite languages, the feminine pronoun is *-ky*, but the masculine is *-k*. In Amorite and Eblaite, the feminine form is *-ki*, though it could also be realised as *-gi*, and the masculine is *-ka*, which could additionally be realised as *-ga* (C. H. Gordon, 1997, p. 107). In Ugaritic, both the feminine and masculine suffixes are realised as *-k*

(Pardee, 1997, p. 134). In Cushitic, *-ki* is used for the feminine, but *-ku* is used for the masculine. A nasal could also be inserted after /k/ in the feminine suffix, as found in Berber, which uses *-(k)m* for the feminine, and *-k* for the masculine, and Chadic which has *-ki(n)* for the feminine and *-ka* for the masculine (Hetzron, 1990a, p. 587). In both Classical and Modern Standard Arabic, *-ki* is used for the feminine and *-ka* is used for the masculine (Fischer, 1997, p. 202).

Bergsträsser (1983, p. 8) provides a reconstruction of the singular second person suffixes in proto-Semitic. He suggests that *-ka* is the masculine form, whereas *-ki* is the feminine form. According to Hetzron (1990a, pp. 587–590), although Afro-Asiatic languages mainly have the masculine form *-ka* and feminine form *-ki* (the latter is sometimes palatalised to *-č* as found in Egyptian or *-š* as in the Cushitic language Awngi), these are merely innovative forms. In a reconstruction of Proto-Afroasiatic, Hetzron (1990a, p. 590) suggests that the older forms are *-ku* for the masculine and /kVm~n/ for the feminine.

Palatalisation of the velar stop /k/ in the 2nd person singular feminine object/possessive pronoun appeared in certain ancient Semitic and Afro-Asiatic languages, including some dialects of Old Arabic. The medieval Arab grammarians termed this process *kaškašah* (see later in this section for further details). In Ancient Egyptian the feminine suffix is realised as *-č* and *-čn*, and the masculine is realised as *-k* (Hetzron, 1990a, p. 587). As in Chadic and

Berber, a nasal is inserted at the end of the Egyptian suffix, but this time with the affricate /č/ (Hetzron, 1990a, p. 587).

In Neo-Semitic languages, the use of fricatives in the 2nd person singular feminine object/possessive pronoun is attested in Neo-Aramaic as *-iš* and *-ōš* for the feminine, versus *-ax*, or *-ōx* for the masculine (Jastrow, 1997, p. 337). It is also prevalent in Modern South Arabian languages. For example, Ḥarsūsi has *-əš* (singular nouns, verbs and prepositions), and *-iyəš* (plural nouns) for the feminine, while the masculine forms are *-ək* (singular nouns), *-iyək* (plural nouns), and *-ōk* (verbs and prepositions) (Simeone-Senelle, 1997, p. 388). In Jibbāli, where all suffixes are only attached to definite nouns, the feminine forms are *-š* (singular nouns) and *-eš* (plural nouns); whereas the masculine forms are *-k* (singular nouns), and *-ek* (plural nouns) (Simeone-Senelle, 1997, p. 388). The fricative is also present in the different realisations of the 2nd person singular feminine suffix of two Mehri dialects, Yemini Mahriyōt from Ḥawf and Omani Mehreyyet. Three types of suffixed pronouns exist in these two dialects (Watson, 2012, p. 67). First, there are those acting as object pronouns annexed to perfect verbs (2p.m.s./3p.f.pl.), as well as pronoun suffixes attached to most monoliteral, bilateral and some trilateral prepositions. These are realised as *-iš* ~ *-ōš* for the feminine and *-ūk* for the masculine in Mahriyōt, and as *-ayš* ~ *-ēš* for the feminine and *-ūk* ~ *-ēk* for the masculine in Mehreyyet (Watson, 2012, p. 67-76). The second type includes possessive pronouns attached to singular nouns and certain trilateral prepositions; object pronouns suffixed to all other verbal forms; and pronouns annexed to the adverbial particles *‘ād* ‘still’ and *bār* ‘already’. These are

realised as *-(a)š* for the feminine and as *-(a)k* for the masculine in Mahriyōt, and as *(a)-š ~ -(i)š* for the feminine and as *-(a)k* for the masculine in Mehreyyet (Watson, 2012, pp. 67-76). The third type includes those that act as possessive pronouns attached to plural nouns, and as pronoun annexes to certain prepositions. This type is realised as *yaš ~ -iš* for the feminine and *-yak* for the masculine in Mahriyōt, and as *-ša* for the feminine and *-ka* for the masculine in Mehreyyet (Watson, 2012, pp. 67-76). Hobyōt from Ḥawf has the feminine forms *-š* (singular nouns), *-šɛ* (plural nouns), and *-iš* (verbs and prepositions) and the masculine forms *-k* (singular nouns), *-kɛ* (plural nouns), and *-ōk* (verbs and prepositions) (Simeone-Senelle, 1997, p. 388). In Soqoṭri, the feminine suffix is *-š*, and the masculine suffix is *-k*, however these are very rarely suffixed to nouns or verbs (Simeone-Senelle, 1997, pp. 388-389).

Many Ethiopian varieties exhibit the use of [š] in the 2nd person feminine suffix. For instance, in Harari, the feminine form is *-aš*, whereas the masculine is *-x* (Wagner, 1997, p. 490). In Amharic, the feminine suffix is realised as *-š* and *-əš*, and the masculine is realised as *-h* and *-əh* (G. Hudson, 1997, p. 462). In addition, the Silt'e group (East Gurage) produces *-āš* for the feminine suffix, and *-ā* or *-āha* for the masculine suffix (Gutt, 1997, p. 511). In the outer South Ethiopic Gafat variety, *-aš* is the feminine suffix, whereas *-(ə)ha* is the masculine suffix (Hetzron, 1997, p. 540). The Outer South Ethiopic Inor variety uses *-aš* for the feminine and *-ahā* for the masculine suffixes (Hetzron, 1997, p. 540).

In modern Arabic dialects, the use of *-iĉ* is attested in the Syrian-Jordanian desert, the Jordanian city of as-Salt, southern Iraq, Khuzestan, throughout the eastern side of the Arabian Gulf, and in Yemen (cf. Herin & al-Wer, 2013; Holes, 1991; il-Hazmy, 1975; Ingham, 1982; Kaye & Rosenhouse, 1997; Prochazka, 1988; Watson, 2007). The use of *-iš* is found in Yemen, southern Saudi Arabia, Oman (cf. Holes, 1991, 2013; Kaye & Rosenhouse, 1997), and within al-ʿAḥsāʾ, specifically in al-Hufūf (Prochazka, 1988).

Many Neo-Semitic languages can be seen to exhibit similar frication patterns of the 2nd person singular feminine object/possessive pronouns. The masculine is sometimes also changed, either via glottalisation or debuccalisation, i.e. /k/ → /h/, or frication, /k/ → /x/. Overall, a distinction between the male and female addressee is regularly maintained in the majority of these varieties.

7.2.2 Views of the medieval Arab grammarians and others on the linguistic and semantic constraints on suffix (de)palatalisation in Arabic

In this section, notes on palatalisation in the suffix will be provided over two dimensions. First, medieval Arab grammarians' remarks will be provided, based on how they described Arabic varieties that existed at approximately the same time that Old Arabic texts were produced. After this, the views of contemporary scholars on this matter will be examined, based on their use of medieval and synchronic sources of Arabic.

Although the eighth-century grammarian Sībawayh (cf. Kitāb, Vol. 4, p. 200) noted reflexes of *-ik* that involve fricative, and probably affricate realisations of /k/, the terms *kaškašah* and *kaskasah* only came to be used by later medieval linguists such as ibn Jinnī (Xaṣā'is, Vol. 2, p. 11; Ṣinā'at, p. 229). Al-Fālī (cited in Xizānah, Vol. 11, p. 491) states that *kaškašah* is used in reference to a realisation of this suffix in the form *-kiš*. He explains that /i/ in *-kiš* was changed to /a/ to form the verbal noun *kaškašah*, in the same way that /i/ in *bismi llāh* 'in the name of God' is changed to /a/ in *basmalah* 'saying in the name of God'.

The words *kaškašah* and *kaskasah*, like *zalzalah* 'earthquake', and *zaxrafah* 'ornamentation', have the morphological structure of C1aC2C3aC4ah, known as the *fā'lalah* structure in Arabic, which is a common pattern for quadrilateral verbal nouns. The *fā'lalah* structure is used to name various phonological processes in Arabic, including *'an'anah* (/ʔ/ → /ʕ/), which according to ibn Jinnī (Ṣinā'at, Vol 1, p. 229) is a process found in the speech of the tribe of Tamīm. Quadrilateral roots where C1 = C3 and C2 = C4 are very common for onomatopoeic words, especially words for sounds that humans and animals make, e.g. *hamhamah* 'human whisper or the voice of cows, elephants and the like'. Early Arabic grammarians discussed the *kaškašah* and *kaskasah* phenomena using the Arabic orthographical symbols <ش>, <س>, <کش>, and <كس>, which appear to represent *-(u~a~i)š*, *-(u~a~i)s*, *-(u~a~i)kiš* and *-(u~a~i)kis* respectively. It should be noted that Arabic lacks an orthographical symbol that can clearly represent *-(u~a~i)č* or *-(u~a~i)ć*. As Arabic linguists have used orthographical symbols

to describe the outcomes of *kaškašah* and *kaskasah*, the specific phonetic realisations involved remain unclear. A group of reflexes that may potentially have been referred to by these two terms are suggested based on what is found in contemporary dialects, as well as what their apparent orthographical descriptions entail. Relying on synchronic dialects, the term *kaškašah* may refer to the replacement of the 2nd person feminine singular object/possessive suffix *-ik* by *-(u~a~i)č*, *-(u~a~i)š* (cf. Holes, 1991, pp. 653–654), or *-(u~a~i)kç* (cf. Watson, 1992, p. 77). If we assume precise orthographic representation, the term *kaškašah* may refer to the insertion of [š] to *-(u~a~i)ki* giving *-(u~a~i)kiš*. However, as will be seen below, some researchers such as ibn Durayd (cf. Jamharah, 1978, p. 207), al-Jindī (1983, p. 361), and al-Maṭlabī (1978, p. 109) argue that *kaškašah* refers only to the realisation *-(u~a~i)č*. The initial vowels (*u~a~i*) mark the nominative, accusative, and genitive case endings respectively. Examples of *kaškašah* are *ḥāl-iš*, *ḥāl-ič*, *ḥāli-kç*, or *ḥāl-ikič* ‘your state’, and *hawā-š*, *hawā-č*, *hawā-kç*, ‘your desire’ as attested in contemporary dialects. Parallal examples, necessarily based on taking the orthography used by medieval grammarians at face value, would be *ḥālu-kiš* ‘your state’, *hawā-kiš*, or *hawā-kič* ‘your desire’. Similarly, *kaskasah* is the replacement of the feminine suffix *-(u~a~i)k* by *-(u~a~i)s* or *-(u~a~i)ć* (IPA [ts]), e.g. *ḥāl-is*, *ḥāl-ić* ‘your state’, and *abū-s*, *abū-ć* ‘your father’, and perhaps to the change of *-(i)ki* to *-(i)kis* based on the orthographic symbols of medieval grammarians, e.g. *ḥāli-kis* ‘your state’, and *abū-kis* ‘your father’. For completeness, note that the masculine form of the 2nd person singular object/possessive suffix is *-(u~a~i)k(a)* post-consonantly, and *-k(a)* post-vocally with a lengthening

of stem final vowel. Examples of the masculine suffix are *ḥālu-k(a)*, *ḥāl-ak(a)*, and *ḥāl-ik(a)* ‘your state’, and *axū-k(a)* ‘your brother’.

Sībawayh (Kitāb, Vol. 4, p. 199) discussed three types of reflexes of the 2nd person feminine pronoun *-ik*, other than the standard *-ik* form, as used by some Arabs. The first realisation seems to straightforwardly correspond to *-(u~a~i)š*. He explained that a large group of Banī Tamīm, as well as some groups of Banī ʿAsad, replace <كاف> ‘[k]’, with <شين> ‘[š]’, e.g. *ʾinna-šī ḍāhibatun* ‘you 2p.f.s. are going’, *māla-šī ḍāhibatun* ‘why are you 2p.f.s. going’ (Kitāb, Vol. 4, p. 199). Although Sībawayh (Kitāb, Vol. 4, p. 199) cited the examples in connected speech, he ascribes this type of replacement to the need of clarifying the difference between male and female addressees in pause. In his description of the second reflex, Sībawayh (Kitāb, Vol. 4, p. 199) says that some Arabs attach <سين> ‘[s]’ to <كاف> ‘[k]’ only in pause, e.g. *ʾaʿtaytu-kis* ‘I gave you 2p.f.s.’, and *ʾukrimu-kis* ‘I honor you 2p.f.s.’. Another group of speakers attach <شين> ‘[š]’ to <كاف> ‘[k]’, e.g. *ʾaʿtaytu-kiš* ‘I gave you 2p.f.s.’, and *ʾukrimu-kiš* ‘I honor you 2p.f.s.’ (Kitāb, Vol. 4, p. 199). The latter two reflexes seem problematic for many linguists. Although Sībawayh (Kitāb, Vol. 4, pp 199-200) has clearly stated that either <سين> ‘[s]’ or <شين> ‘[š]’ are attached to the <كاف>, ‘[k]’, many Arab linguists such as al-Maṭlabī (1978, p. 109), ibn Durayd (cf. Jamharah, 1978, p. 207), and al-Jindī (1983, p. 361) argue against the existence of the realisations *-(u~a~i)kiš* *-(u~a~i)kis*. Their argument is predicated upon the idea that because old grammarians did not have orthographical symbols for *-(u~a~i)č* and *-(u~a~i)ć*, they used <كش> (lit. *-(u~a~i)kiš*) and <كس>, (lit. -

(*u~a~i*)kis), to refer to [č] and [ć]. This leads critics to claim that subsequent grammarians were confused about this and mistakenly believed that it was literally *-(u~a~i)kiš* and *-(u~a~i)kis*. Johnstone (1963, p. 252) consider the latter view more probable than the literal *-(u~a~i)kiš* *-(u~a~i)kis* interpretation. An alternative view is provided by Watson (1992, p. 77) who suggests that *kaškašah* actually refers to *-kç* which is attested synchronically in the speech of some North Yemeni dialects. According to this view, the [kç] realisation has later been extended to other phonological contexts and started to diffuse to other locations. Watson proposes that [kç] has developed into [č]. Nonetheless, Owens (2013, p. 197) refutes this view on the basis that [kç] does not normally lead to [č] and that [kç] is not attested in contemporary dialects in contexts other than the suffix.

Al-Maṭlabī (1978, p. 109) and ibn Durayd (cf. Jamharah, 1978) seem to be correct in saying that the *-(u~a~i)kiš* and *-(u~a~i)kis* forms are unlikely to have been used by Arabs in the past, especially given that they are not attested in modern dialects. However, one wonders why medieval Arab grammarians did not combine two orthographical symbols such as <تش> (i.e. *-(u~a~i)t + š*, and <تس> (i.e. *-(u~a~i)t + s*), which would have better described the sounds involved than <کش>, i.e. *-(u~a~i)kiš*, and <كس>, i.e. *-(u~a~i)kis*. A possible explanation for this is that the ancient grammarians might have kept <ك>, i.e. [k], in order to indicate the underlying form and then added only <ش>, i.e. [š], to indicate either [š] or [č], and <س>, i.e. [s], to indicate either [s] or [ć].

If we rule out the possibility of the existence of the *-(u~a~i)kiš* and *-(u~a~i)kis* forms as well as the consideration of the *-(u~a~i)-kç* form, we still have the matter of what precisely is being referred to by the word *kaškašah*. It is not very clear whether it denotes *-(u~a~i)š* or *-(u~a~i)č*, or both. In this regard, aṣ-Ṣuyūṭī (Muzhir, p. 221) distinguishes *kaškašah* from *šanšanah*. He states that *kaškašah* refers to affrication or the use of the *-(u~a~i)č* form, whereas *šanšanah* refers to frication and the use of the *-(u~a~i)š* form. Given that aṣ-Ṣuyūṭī is said to have died in 911 AH (Nubalā'), i.e. around 1505 CE, this does not provide a clear answer regarding whether or not a similar distinction existed in medieval times. As regards *kaskasah*, it is also not very clear whether it refers to *-(u~a~i)s* or *-(u~a~i)ć* or both.

Several researchers have attempted to explain the origins and reasons behind the existence of variations in the use of Old Arabic 2nd person singular feminine object/possessive enclitic *-ik*. Most Arab grammarians, e.g. Sībawayh (Kitāb, Vol. 4, p. 199), al-Mibrad (Kāmil, Vol. 2, p. 238), ibn Jinnī (Ṣinā'at, Vol. 1, p. 206), and al-Jindī (1983, p. 361), have stated that Arabs resorted to *kaškašah* and *kaskasah ḥiršan 'ala al-bayān* 'striving for clarity'. That is to distinguish the gender of the addressee, which would otherwise be vague after the removal of the final short vowels in pause. According to Sībawayh (Kitāb, Vol. 4, pp. 199–200), *kaškašah* and *kaskasah* shifts are performed in order to emphasise and give a sufficient phonological expression to the feminine and masculine distinctions through the use of a consonant rather than a vowel, the former being more powerful than the latter. He (Kitāb, Vol. 4, p. 199) argues that Arabs similarly used the consonant /n/ to

make the following masculine and feminine differentiation: *ʾantum* ‘you m.pl.’ vs. *ʾantunna* ‘you f.pl.’. After this, he (Kitāb, Vol. 4, p. 199) rationalises the replacement of /k/ by /š/ by explaining that they are both voiceless and pronounced in close proximity in the mouth. This last point is also supported by the works of al-Mibrad (Kāmil, Vol. 2, p. 238), who adds that there is a *tafaššī* ‘spread of air flow in the mouth’ in the pronunciation of [š]. From a western diachronic phonological perspective, the fricative /š/ involves a flow of air as opposed to the stop /k/, making it an easier sound to pronounce and therefore more likely for /k/ to change into via lenition.

From the above description, Sībawayh (Kitāb, Vol. 4, p. 199) not only suggests a functional motivation, namely the avoidance of homophony between the masculine and the feminine. He also seems to be aware of some of the phonological details underlying *kaškašah*. At first sight, this explanation seems to be superior to other approaches that attempt to explain the reasons behind its occurrence, but which fail to describe the type of change involved. If Sībawayh’s argument was valid then we would expect *kaškašah* and *kaskasah* to be taking place first in pause, before being generalised to non-pausal positions. In this regard, medieval Arab grammarians disagreed on whether or not *kaškašah* and *kaskasah* occurred only in pausal positions, or whether it was found in both pausal and non-pausal positions. Some Arabic grammarians such as Sībawayh (Kitāb, Vol. 4, pp. 199-200), al-Mibrad (Kāmil, Vol 2, p. 238), and aḡ- ḡaʿālibī (Fiqh, p. 151-152) argued that they are used only in pause. Others such as al-ʿAšmūnī (Šarḡ, vol. 1, p. 878) referred to *kaškašah* without restricting it to pausal

positions. A third opinion was expressed by ibn Jinnī (Ṣināʿat, Vol. 1, p. 206), who states that speakers differ: some use them in pausal, while others use them in both pausal and non-pausal positions. These variations potentially suggest different stages of change that seem to be triggered in pausal contexts, especially given that no scholar has stated that it occurs only in non-pausal positions.

Holes (1991, pp. 659–660) takes issue with the medieval Arab grammarians' view that *kaškašah* and *kaskasah* are carried out to clarify gender distinctions. Instead, he (1991, p. 660) argues that if this was really the motivation then they would have treated these suffixes in the same way as the second person singular verbal perfect suffixes *-ta* and *-ti*, as in Modern Standard Arabic *ḍarabta* 'you m.s. hit' and *ḍarabti* 'you f.s. hit'. In the majority of present-day Arabic dialects, the masculine short vowel /a/ in *ḍarabt* 'you masc. hit' has been lost, while the feminine short vowel /i/ as in *ḍarabti* 'you f.s. hit' has been retained. This is also true for al-ʿAḥsāʿ Arabic, except that the feminine form [i] may sometimes be replaced with [ay], e.g. *ḍarabtay* 'you f.s. hit'. Arabic dialects that feature palatalisation of the 2nd person singular feminine object/possessive suffix usually exhibit an apocope of the final short vowel /i/ (cf. Holes, 1991; Prochazka, 1988), e.g. *maʿi-š* 'with you f.s.' (Abhā, Saudi Arabia) (Prochazka, 1988, p. 220). However, it must be argued that, in many Arabic dialects, /t/ may not be as susceptible to frication and affrication as /k/, especially if the two were compared in word stems as well as in suffixes. Arab grammarians have also tended to focus more on palatalisation in the suffix than word stems, possibly because of

greater awareness of the suffix when it led to ambiguity. It may also be the case that this approach was taken because palatalisation in the suffix was more dominant than in word stems. This is supported by the findings of many studies on contemporary Arabic dialects, including the present study, which demonstrate that palatalisation is more stringently maintained in the suffix than word stems (see sections 7.2.4 and 7.4). Hence, palatalisation of /k/ in the suffix is perpetuated not only by phonological processes but also by morphosyntactic functions. Nevertheless, it could be argued that Holes' analogy applies to non-palatalizing Arabic dialects that preserve and/or omit vowels to maintain distinctions between male and female addressees. For instance, in Levantine, Cairene and urban Ḥijāzī Arabic, the form *-ik* is generally used for the feminine, e.g. *qalam-ik* 'your pen'; whereas *-ak* is used for the masculine, e.g. *qalam-ak* 'your pen', post-consonantly. However, in post-vocalic environments, *-ki* is used for the feminine, e.g. *abū-ki* 'your father', whereas *-k* is used for the masculine, e.g. *abū-k* 'your father', with a lengthening of stem-final vowel (cf. Herin & al-Wer, 2013; Sieny, 1978; Watson, 2007). Similarly, Sudanese Arabic retains a gender distinction with *-ik* and *-ki* for the feminine, compared to *-ak* and *-ka* for the masculine (Dickins, 2011, p. 940). This gives an indication that insertion or deletion of the final vowel to the suffix can be sensitive to morphosyntactic functions.

Neutralisation of gender may take place in some varieties of Arabic. This has been noted in the use of post-vocalic (-k) by Najdī speakers in Jeddah (Alessa, 2008, p. 184), as well as in some post-vocalic realisations in the present corpus of al-ʿAḥsāʾ dialect e.g. *ixū-k* 'your f.s. & m.s. brother'.

However, Alessa (2008) notes that [-k] reflexes of the 2nd person singular feminine pronoun are rare in comparison to other reflexes. In al-ʿAḥsāʿ Arabic, neutralisation of gender also occurs in the extremely limited context of post-vocalic depalatalised reflexes (see section 7.3.1).

What can be concluded from the above is that palatalisation in the suffix is most probably not a recent phenomenon. The descriptions provided by medieval Arab grammarians about Arabic varieties, which are closely related to Old Arabic, support the view that both palatalised and non-palatalised realisations of /k/ in the suffix have co-existed at some previous point in time. This theory is bolstered by an examination of synchronic Arab varieties. It can also be added that the natural phonological process of palatalisation is promoted by a morphosyntactic function for gender differentiation.

7.2.3 Geographical distribution of the suffix in the Arabian Peninsula

Modern Arabian Peninsula dialects have five reflexes of the Old Arabic 2nd person singular feminine object/possessive suffix *-ik*, namely: *-(i)k(i)*, *-(i)kʲ(i)*, *-(a~i)š*, *-(a~i)č(i)*, and *-(a~i)čʲ(i)*. Holes (1991, pp. 653–654) broadly depicts the geographical distribution of each of these realisations as follows. The *-(i)k(i)* and *-(i)kʲ(i)* forms are a ‘western feature’ used across the north-south coastal corridor of the Yemeni/Saudi Tihāmah. The *-(a~i)š* reflex is a ‘southern’ feature, including southern Saudi Arabia, Yemen, and Oman. The *-(a~i)š* realisation also exists in certain remote eastern areas, like al-ʿAḥsāʿ, Bahrain, and the Omani Jabal al-ʿAxdar. The *-(a~i)č* form is a ‘central’ and

north central feature, which covers the entire area of Najd, including Qaṣīm and Jabal Šammar. Finally, the *-(a~i)č* reflex is mainly an ‘eastern’ feature. Its use stretches from the Syrian Desert, southern Iraq, Khuzestan, all the way through the eastern Gulf littoral region. The underlying reasons for such geographical distributions are discussed below.

It may be said that western dialects, and more particularly Meccan Arabic, bear a strong resemblance to the urban dialects spoken in Egypt, Sudan, and the Levant (Ingham, 1971, p. 273). The resemblance is not only in terms of the *-(i)k(i)* reflex, but also in terms of other linguistic features, such as the use of [t] and [d] instead of [θ] and [ð] respectively. This can perhaps be attributed primarily to the influence of settlers who came from Sudan, Egypt and the Levant to this area. Geographical proximity and continuous contact with visitors from these counties to Mecca also seems likely to have had an influence as well.

Holes (1991, pp. 662–664) argues that frication in the 2nd person feminine enclitic in Yemeni Arabic is a vestige of Himyaritic and other South Arabian languages, all of which fricated proto-Semitic *-ki* to *-š(i)*. Long-term Arabisation of Himyaritic and South Arabian languages eventually led to the loss of roots with /š/ < /k/, meanwhile the use of *-š(i)* as a reflex of proto-Semitic *-ki* remained (Holes, 1991, p. 664). After the Arabisation of the southern Arabian Peninsula, Yemeni migration started to flow in two directions: northeast to central Arabia, and then onwards to ancient Baḥrayn and Oman (Holes, 1991, p. 664). Holes (1991, p. 664) states that this could

explain why some speakers in areas distant from Yemen, such as Bahrain, al-^ʿAḥsāʿ, and Jabal al-Axḍar in Oman, still maintain the Yemeni-origin *-(a~i)š* suffix.

Additionally, Bahrain has the *-(a~i)č* realisation due to later extensive Bedouin migrations from central Arabia (Holes, 1991, p. 655). The latter point applies to al-^ʿAḥsāʿ as well. The *-(a~i)č* form seems to be closely related to the general phonological change $k \rightarrow \check{c} \rightarrow \acute{c}$ (Holes, 1991, p. 657), which originally took place in Najd and was carried away with those who migrated east to Bahrain and al-^ʿAḥsāʿ during the [č] phase (for more details, see section 6.2.1).

7.2.4 Social constraints on suffix (de)palatalisation

Several Arabic sociolinguistic studies have examined the possible associations between (de)palatalisation processes and social factors. For instance, and in relation to palatalisation diversity in the Gulf region, Holes (1991) reports that the *[-(i)č]* variant is used mainly by Sunnis, while the *[-(i)š]* variant is used by Shiites in both al-^ʿAḥsāʿ and Bahrain.

In relation to the study of the dialect of Bahrain, al-Qouz (2009) has provided a more recent examination of the *(-k)* variable as found in the speech of school students. She studied this variable in terms of sect, age, type of school, gender and class. Al-Qouz (2009) did not detect any shifts to *[-k]* similar to those detected in Saudi by al-Azraqi (2007). Instead, the variants used in Bahrain are either *[-č]* or *[-š]*. She found the *[-č]* variant to be

categorically used by Sunnis. Among Shiites, alternations were found between [-č] and [-š] to be strongly associated with age and class. The [-š] variant is maintained by lower class students aged 6–8 and 9–11. On the other hand, the use of the [-č] variant has been commonly observed among upper and middle class students aged 12–14 and 15–17. As such, the shift from [-č] to [-š] requires two age stages at school. Al-Qouz (2009) explains that such changes result from the duration of contact within the school context.

In Saudi Arabia, a number of relatively recent studies have examined the social motivators of depalatalisation processes. For example, al-Azraqi (2007) investigated the progress towards the [-ik] variant in five Saudi cities: Riyadh, ad-Dammām, Buraydah, Abhā, and Sakākah. She observed that males typically have a higher approximation to the neutral suffix [-(i)k(i)] than females. In addition, she noted that people from major and more modernised cities like Riyadh and ad-Dammām use the target [-(i)k(i)] variants, more often than those from other cities.

Alessa (2008) investigated the 2nd person singular feminine object/possessive suffix in the speech of Najdī migrants in Jeddah, Saudi Arabia. The Najdī feminine variant is [-ič]; whereas the masculine is [-ik] (Alessa, 2008, p. 156). In contrast, the urban Ḥijāzī feminine variants are [-ik] post-consonantly and [-ki] post-vocalically, whereas the masculine variant is [-ak] (Alessa, 2008, p. 156). The process whereby Najdī migrants approximate the Ḥijāzī variants is somewhat complex. Najdī speakers in Jeddah use the following feminine variants: [-č], [-ik] post-consonantly, [-

ki] both post-consonantly and post-vocalically, and [-k] post-vocalically (Alessa, 2008, pp. 157–158). For the masculine suffix, however, they still use the Najdī variant [-ik], which raises the risk of gender neutralisation with the target Ḥijāzī post-consonantal [-ik] suffix (Alessa, 2008, pp. 158–159). To avoid this, many Najdī speakers extend the use of [-ki] to post-consonantal contexts, this is an innovation with respect to unmixed varieties of both the Najdī and the Ḥijāzī dialects (Alessa, 2008, p. 159). A minority of Najdī migrants, however, do not make any gender differentiation post-vocalically, instead employing the [-k] variant for both genders (Alessa, 2008, pp. 158–159).

Alessa (2008) found depalatalisation to be generally restricted in the suffix in comparison to the word stem in the speech of Najdī speakers in Jeddah. She attributes the maintenance of palatalisation in the suffix to the morphosyntactic function of gender differentiation. In correlation with social factors, she found that the use of the target post-consonantal [-ik] variant increases during the movement from young to elderly speakers; suggesting a change in progress. She also found that middle-aged (39–54) and young speakers (10–24) advance the change towards the post-vocalic [-ki] variant. In relation to gender, women were found to exhibit a higher level of approximation to the urban Ḥijāzī post-consonantal suffix [-ik] than men. No significant gender differences were identified with the post-vocalic suffix. In terms of contact, high-contact speakers, i.e. those who have close friendships, kinship or intermarriage relationships with urban Ḥijāzī locals, used both the target post-consonantal variant [-ik] and the intermediate post-consonantal

variant [-ki]. In contrast, low-contact speakers used [-č] more. No statistically significant findings were found post-vocally.

When al-Rojaie (2013) examined the 2nd person singular object/possessive feminine pronoun in Qaṣīm, he did not find it to be socially stratified. In fact, it was categorically palatalised by all speakers. This was unlike his findings with word-stem (k) which was strongly influenced by age, education, and gender. He attributes the preservation of palatalisation in the clitic to the need of avoiding any neutralisation of gender. Likewise, though conducted much earlier and in a non-Saudi context, Abdel-Jawad (1981), found that, unlike word-stem [č], retention of [-(a~i)č] is common among speakers of ʿAmmān, Jordan. Again he rationalised this by saying that speakers keep the palatalised form to avoid confusion between reference to males and females.

Generally, just as the original palatalisation was hypothesised to have been stimulated by the need to clearly express gender differences, many of the above studies postulate that depalatalisation of the suffix is restricted in the clitic for the same reason, i.e. to avoid loss of gender differentiation. The above studies also demonstrate the existence of correlations between (de)palatalisation of the 2nd person singular feminine object/possessive suffix and external factors such as socio-sectarian affiliation, gender, and city.

7.3 Suffix data

In this section, reflexes of (-ik) in al-ʿAḥsāʿ Arabic will be specified. In addition, categorical speakers will be identified according to their social characteristics. A description will also be provided of the way in which the dependent and independent factors are coded.

7.3.1 Circumscribing variable context

In al-ʿAḥsāʿ Arabic, the 2nd person feminine object/possessive suffix (-ik) may be realised as [-(i)k(i)], [-(a~i)č], or [-(a~i)š]. When the 2nd person feminine pronoun is suffixed to a vowel-final stem, the vowel is lengthened, *bawwarri* → *bawwarrī-k* ~ *bawwarrī-č* ~ *bawwarrī-š* ‘I will show you f.s.’, *ḥayya* → *ḥayyā-k* ~ *ḥayyā-č* ~ *ḥayyā-š* ‘you f.s. are welcome’, and *ibu* → *ibū-k* ~ *ibū-č* ~ *ibū-š* ‘your f.s. father’. It should be noted that in addition to *ibū-k* ~ *ibū-č* ~ *ibū-š* ‘your f.s. father’, the only other word that occurred in the data where [k ~ č ~ š] was preceded by /ū/ was *ixū-k* ~ *ixū-č* ~ *ixū-š* ‘your f.s. brother’. With some words the quality of the low front vowel /a/ is raised and lengthened to become /ē/, e.g. *ʿala* → *ʿalē-k* ‘on you f.s.’, and *ḥawāla* → *ḥawālē-k* ‘around you f.s.’. The presence of final /y/ in the root of *ʿala*, namely ʿ-l-y, may have an influence on the pronunciation of *ʿalē-k*. However, this is not the case with *ḥawāla*, which has the root ḥ-w-l. Some speakers in the corpus inserted a short high front vowel /i/ to the end of only the [-(i)k(i)] variant, e.g. *ʿasa* → *ʿasā-ki* ‘I hope you are’, *ixu* → *ixū-ki* ‘your f.s. brother’, *fī* → *fī-ki* ‘in you f.s.’, *ʿala* → *ʿalē-ki* ‘on you f.s.’.

When the pronoun is suffixed post-consonantly, a short high front vowel /i/ is inserted initially to the suffix, e.g. *bēt* → *bēt-ik* ‘your f.s. house’, and *ʿyūn* → *ʿyūn-ik* ‘your f.s. eyes’. Within only the palatalised variants, the low front vowel /a/ sometimes alternates with /i/ when the suffix is preceded by the alveolar sounds /n/, /t/, and /l/, e.g. *inn-aš* ‘that you f.s.’, *taḥt-ač* ‘under you f.s.’, *gabl-ač* ‘before you f.s.’. Alternations between /a/ and /i/ seem to be constrained by tense and part of speech, in different ways with each of the /n/, /t/, and /l/ sounds. With the /n/ sound, the possibility of alternations between /a/ and /i/ occurs mainly in present simple verbs with a plural subject suffix, e.g. *yināqšūn-ač~ič* ‘they argue with you f.s.’, *yinsōn-ač~ič* ‘they forget you f.s.’, future tense verbs with a plural subject suffix, e.g. *byaʿfūn-ač~ič* ‘they will give you’, *byisʿalūn-ač~ič* ‘they will ask you f.s.’, active participle, e.g. *ṭāyʿin-ač~ič* ‘they obey you f.s.’, and complementisers, *inn-ač~ič* ‘that you f.s.’, *kaʿann-ač~ič* ‘it is as if you f.s.’, *laʿann-ač~ič* ‘because you f.s.’. In contrast, with nouns ending with /n/, only /i/ is inserted, e.g. *talifūn-ič* ‘your f.s. phone’, *yidēn-ič* ‘your f.s. hands’, *ʿyūn-ič* ‘your f.s. eyes’. With the voiceless alveolar stop /t/, the low front vowel /a/ alternates with /i/ in past tense verbs, where *-t* is a suffix standing for first person subject, *simaʿt-ač~ič* ‘I heard you f.s.’, *jīt-ač~ič* ‘I came to you f.s.’, *misakt-ač~ič* ‘I held you f.s.’, and *ʿtīt-ač~ič* ‘she gave you f.s.’, and in prepositions, e.g. *taḥt-ač~ič* ‘under you f.s.’, but not in nouns where /i/ is only used, e.g. *bēt-ič* ‘your house’, *rkēbāt-ič* ‘your f.s. knees’. With the voiced alveolar lateral approximant /l/, the low front vowel /a/ is mostly found in prepositions, however /i/ can also be used, e.g. *l-ač~ič* ‘for you f.s.’, *gabl-ač~ič* ‘before you f.s.’, and *miθl-ač~ič* ‘like you f.s.’. Three words, all ending with a nasal, occurred in the data

where neither /i/ nor /a/ were inserted: *min-č* ‘from you f.s.’, *an-č* ‘about you f.s.’, and *sallam-č* ‘may God keep you f.s. safe’.

For the purposes of the present study, realisations of the feminine suffix were grouped into three variants depending on the type of consonants involved and disregarding any initial vowels, viz. [-(i)k(i)], [-(a~i)č], and [-(a~i)š]. In order to avoid overlaps and non-orthogonality, no further divisions were made within reflexes.

The 2nd person singular masculine object/possessive suffix also needs to be identified so that it is not confused with the feminine suffix. The masculine suffix is realised as *-(a~ə)k*. Initial vowels of the masculine suffix seem to follow a parallel pattern to its feminine counterpart but with some exceptions. With vowel-final stems, the vowel is lengthened, e.g. *abya* → *abyā-k* ‘I want you m.s.’, *awaddi* → *awaddī-k* ‘I will take you m.s.’, *ibu* → *ibūk* ‘your m.s. father’, *alē-k* ‘on you m.s.’. In this context, a distinction between the 2nd person feminine and masculine suffix is lost. Therefore, context was used within interviews to identify the gender of post-vocalic realisations of the pronoun. In post-consonantal contexts, instead of [i], which is inserted to the feminine suffix with all realisations, [ə] is inserted to the masculine. Insertion of [a] as an alternate to [ə] takes place in the same contexts found with the palatalised variants of the feminine suffix, i.e. with /n/, /t/, and /l/ when the final syllable is stressed, e.g. *in^h-ak* ‘that you m.s.’, *yitqabbalū^h-ak* ‘they accept you m.s.’, *sima^h-ak* ‘I heard you m.s.’, *l^h-ak* ‘for you m.s.’. This means that, in post-consonantal contexts, a distinction is made

between the feminine and the masculine, i.e. *-ik* for the feminine, and *-ək* for the masculine, and *-ač* or *-aš* for the feminine, and *-ak* for the masculine.

In certain varieties of Arabic, it should be noted that palatalisation may occur with the 2nd person feminine plural. This can be seen in some varieties of Yemeni Arabic, in the form of *čunna/-činna* (Kaye & Rosenhouse, 1997, p. 288) and as *-čīn* in the Jordanian cities of ‘Ammān, e.g. *abū-čīn* ‘your father’ (Abdel-Jawad, 1981, p. 297) and as-Salt (Herin & al-Wer, 2013, pp. 63–64). In ‘Ammān, /k/ in the masculine plural is also palatalised and the suffix is realised as *-čūm*, e.g. *abū-čūm* ‘your m.pl. father’ (Abdel-Jawad, 1981, p. 297). Dialects which have an unconditioned palatalisation of word-stem /k/ to /č/ such as central Jabal ‘Axdar villages in Oman and some Shiite villages located in north-east and east Bahrain also palatalise /k/ in the 2nd person singular masculine (Holes, 1991). In Yemeni Arabic the 2nd person singular masculine pronoun may be realised as *-ča/-ša* (Kaye & Rosenhouse, 1997, p. 288). In the present data of al-‘Aḥsā’ Arabic, no /k/ palatalisation was found in the 2nd person plural pronoun or the 2nd person singular masculine pronouns. As such, the analysis was limited to the 2nd person singular feminine pronoun.

In terms of categorical speakers, this matter is slightly complicated due to the number of realisations involved, i.e. [-(i)k(i)], [-(a~i)č], and [-(a~i)š], each having categorical speakers, and to the nature of analysis, which requires splitting data into two stages: [-(i)k(i)] against both [-(a~i)č] and [-(a~i)š], and [-(a~i)č] against [-(a~i)š].

With the first stage of analysis, i.e. [-(i)k(i)] against both [-(a~i)č] and [-(a~i)š], two types of categorical speakers were found. The first group categorically used [-(i)k(i)], while the second group categorically used the palatalised variants [-(a~i)č] and/or [-(a~i)š]. Table 11 shows the first group of categorical speakers. A total of twelve speakers only used the [-(i)k(i)] variant. Almost all of them were adolescent and young Sunnis (91.7%). Only one Shiite (8.3%) categorically used the [-(i)k(i)] variant. However, this speaker had spent 10 years in Riyadh. There were 77 remaining non-categorical speakers, i.e. those who varied between [-(i)k(i)] and [-(a~i)č]/[-(a~i)š]. The extremely high rate of categorical speakers among adolescent and young Sunnis supports Labov's (2007) view on linguistic transmission, in which he posits that younger generations tend to select innovative forms out of inherited variable features for regular use.

Table 11 Categorical speakers of (-ik): Speakers using only [-(i)k(i)]

Sunni	Adolescent		Young		Middle-aged		Elderly		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Male	6	50	1	8.3	0	0	0	0	7	58.3
Female	2	16.7	2	16.7	0	0	0	0	4	33.4
Total	8	66.7	3	25	0	0	0	0	11	91.7
Shiite	Adoles		Young		Middle-aged		Elderly		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Male	0	0	0	0	1	8.3	0	0	1	8.3
Female	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	8.3	0	0	1	8.3
Grand total 12										

The second group is shown in Table 12. There were 43 speakers who only used either [-(a~i)č] or [-(a~i)š], i.e. they never used the [-(i)k(i)] variant during interviews. This number is much larger than the number of categorical speakers who only use [-(i)k(i)] (i.e. 43 vs. 12). Hence, the use of palatalised variants is shown to be more predominant in the dialect of al-ʿAḥsāʾ than the depalatalised variant, as will be seen also through overall percentages of the (-ik) variable. The number of Sunnis who are categorical in the use of [-(a~i)č] or [-(a~i)š] is lower than Shiites: fifteen (34.7%) for the former and twenty eight (65%) for the latter. Among Sunnis, there were fewer categorical male speakers than females. In terms of age, there were fewer non-categorical adolescents compared to the older age groups.

Table 12 Categorical speakers of (-ik): Speakers using only [-(a~i)č] or [-(a~i)š]

Sunni	Adolescent		Young		Middle-aged		Elderly		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Male	0	0	1	2.3	1	2.3	2	4.6	4	9.2
Female	0	0	1	2.3	6	13.9	4	9.3	11	25.5
Total	0	0	2	4.6	7	16.2	6	13.9	15	34.7
Shiite	Adolescent		Young		Middle-aged		Elderly		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Male	1	2.3	2	4.6	4	9.3	7	16.3	14	32.5
Female	0	0	6	13.9	3	7	5	11.6	14	32.5
Total	1	2.3	8	18.5	7	16.3	12	27.9	28	65
Grand total 43										

The second part of the (-ik) analysis involves looking at alternations between [-(a~i)č] and [-(a~i)š]. There were two types of categorical speakers: those who only use [-(a~i)č] and those who only use [-(a~i)š]. Table 13 presents the number of categorical speakers using the [-(a~i)č] variant. Speakers who categorically use the [-(a~i)č] reflex are mainly Sunnis (11 (91.6%) vs. 1 Shiite (8.3%)). The single Shiite speaker works in a grocery shop in a Sunni neighbourhood. Working in a grocery shop can allow the speaker to interact extensively with the inhabitants of its neighbourhood. Such inhabitants can be of both genders and may belong to different age groups. It should be noted that the amount of interaction allowed in such a setting may not necessarily be found had a Shiite been living in a Sunni neighbourhood. Overall, the number of female Sunni categorical speakers exceeds that of males. In relation to age, most of the categorical speakers belong to the age groups above adolescents. This makes sense given that there were eight adolescent Sunnis, who use [-(i)k(i)] categorically (see Table 11).

Table 13 Categorical speakers of (-ik): Speakers using only [-(a~i)č]

Sunnis	Adolescent		Young		Middle-aged		Elderly		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Male	0	0	1	8.3	1	8.3	1	8.3	3	24.9
Female	1	8.3	2	16.7	3	25	2	16.7	8	66.7
Total	1	8.3	3	25	4	33.3	3	25	11	91.6
Shiites	Adolescent		Young		Middle-aged		Elderly		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Male	0	0	0	0	1	8.3	0	0	1	8.3
Female	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	8.3	0	0	1	8.3
Grand total 12										

The number of categorical speakers using the [-(a~i)š] reflex as stratified by social factors is shown in Table 14. As can be seen, the number of Shiites who categorically use [-(a~i)š] highly outnumbers that of Sunnis, twenty-one (80.7%) for the former and only five (19.2%) for the latter. Among Sunnis, categorical speakers are either adolescents or young speakers. In the Shiites group, categorical speakers seem to be distributed evenly across age groups. The number of Shiite male categorical speakers of [-(a~i)š] is thirteen (50%), which is slightly more than the female categorical speakers, who are eight in number (30.7%).

Table 14 Categorical speakers of (-ik): Speakers using only [-(a~i)š]

Sunni	Adolescent		Young		Middle-aged		Elderly		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Male	2	7.7	0	0	0	0	0	0	2	7.7
Female	1	3.8	2	7.7	0	0	0	0	3	11.5
Total	3	11.5	2	7.7	0	0	0	0	5	19.2
Shiite	Adolescent		Young		Middle-aged		Elderly		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Male	4	15.4	2	7.7	4	15.4	3	11.5	13	50
Female	2	7.7	3	11.5	1	3.8	2	7.7	8	30.7
Total	6	23.1	5	19.2	5	19.2	5	19.2	21	80.7
Grand total 26										

In summary, categorical speakers of [-(i)k(i)] are mainly adolescent and young Sunnis. This is similar to the mixed-effects findings on the remaining non-categorical adolescent speakers, who were found to exhibit the highest levels of depalatalisation in comparison to other age groups (see section 7.4.1.2). On the other hand, categorical speakers who only use the palatalised variants [-(a~i)č] and [-(a~i)š] are both Sunnis and Shiites

belonging to age groups older than adolescents. Looking more deeply into the difference between speakers who categorically use only one of the palatalised variants, shows that there are more Sunni categorical speakers of [-(a~i)č] than Shiites. There are more Shiite categorical speakers of [-(a~i)š] than Sunnis, however. This fits with present mixed-effects findings, in which Sunnis are found to show high approximation to [-(a~i)č] compared to Shiites, who have shown a marked tendency to use [-(a~i)š] (see section 7.4.1.2). Categorical speakers of both palatalised variants mainly belong to the non-adolescent age groups, i.e. young, middle-aged, and elderly speakers. This conforms with mixed-effects findings in which young, middle-aged, and elderly speakers are found to show a lower approximation to [-(i)k(i)] compared to adolescents (see section 7.4.1.2).

7.3.2 Coding

In this section, coding of the dependent factor will be discussed first followed by the independent factors. Analysis of the (-ik) variable is divided into two stages: [-(i)k] against both [-(a~i)č] and [-(a~i)š], and [-(a~i)č] against [-(a~i)š]. At both levels, three social factors were considered in the analysis of the suffix and they are, namely socio-sectarian affiliation (Sunni vs. Shiites), age (adolescent, young, middle-aged, elderly), and gender (male vs. female). As can be seen, elderly speakers are not divided into educated and non-educated. This is due to the fact that when two models were compared, one with a split between educated and non-educated elderly speakers and another without this split, the difference between the models did not prove to be significant; indicating that the model with fewer parameters yields a better fit

of the data. As such, education levels within elderly speakers were conflated. By contrast, the difference between adolescents and young speakers proved to be significant. Hence, the model with more parameters was kept in the analysis. For a look at the initial model see section 5.1.2.3.

7.4 Results

Results of the (-ik) variable will be divided into two sections: [-(i)k(i)] against both [-(a~i)č] and [-(a~i)š], and [-(a~i)č] against [-(a~i)š]. In each section, overall distributions and multivariate findings will be given.

7.4.1 The (-ik) variable: [-(i)k(i)] against both [-(a~i)č] and [-(a~i)š]

Findings generally indicate that depalatalisation of (-ik) is at a relatively early stage in al-'Aḥsā' Arabic. It is mainly influenced by socio-sectarian affiliation and age. No significant gender effects were found.

The total number of tokens provided by both categorical and non-categorical speakers is 1649. After the removal of categorical speakers, the number of remaining tokens is 647. The overall proportions of (k) depalatalisation and palatalisation in the 2nd person singular feminine object/possessive pronoun will be examined below. This will be followed by multivariate analysis examining the correlation of social factors with [-(i)k(i)] as the application value.

7.4.1.1 Overall distribution of (-ik): [-*(i)k(i)*] against both [-*(a~i)č*] and [-*(a~i)š*]

The overall proportion of the 2nd person feminine pronoun variants, as shown in Figure 11, indicates that the rate of depalatalisation for both categorical and non-categorical speakers of al-³Aḥsā' dialect is relatively low (22%) in comparison to the [-*(a~i)č*] and [-*(a~i)š*] variants (78%).

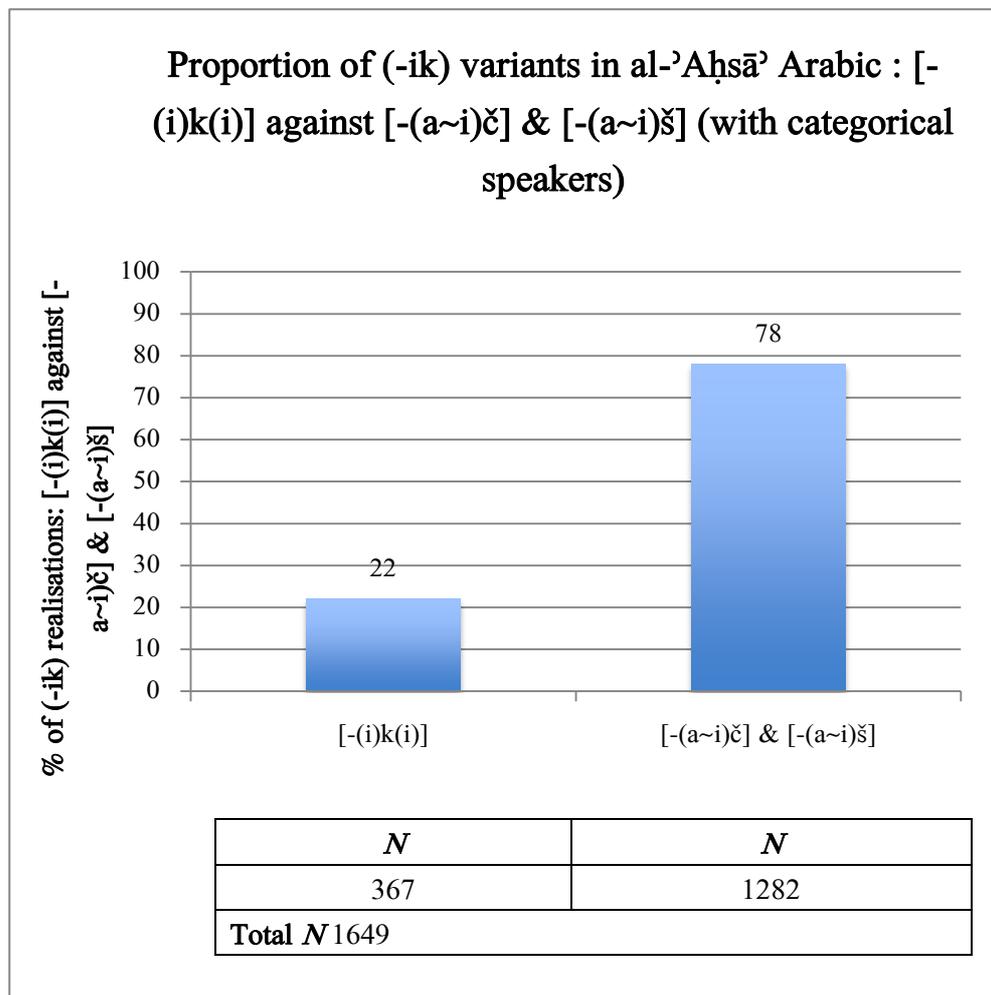


Figure 11 Overall distribution of (-ik) in al-³Aḥsā' Arabic: [-*(i)k(i)*] against [-*(a~i)č*] & [-*(a~i)š*] (with categorical speakers)

Figure 12 presents the distribution of (-ik) variants among non-categorical speakers. The differences between non-categorical speakers' use of [-*(i)k(i)*]

(35.39%) and both [-(a~i)č] and [-(a~i)š] (64.6%) is relatively less pronounced than among all groups, i.e. 22% for [-(i)k(i)] and 78% for both [-(a~i)č] and [-(a~i)š].

Non-categorical speaker results, shown here, are very different from those obtained with the (k) variable in word stems, where the rate of depalatalised [k] (59.1%) highly surpassed that of [č] and [š] (40.9%) (see section 6.4.1.1). The resistance of the suffix against depalatalisation, compared to the advanced depalatalised state of (k) in word stems, has been similarly reported by Abdel-Jawad (1981) in his study of the dialect of ‘Ammān, by Alessa (2008) in her study of Najdī speakers in Jeddah, Saudi Arabia, and by al-Rojaie (2013) in his study of Qašīmī speakers in Saudi Arabia. One possible explanation for this finding is that the palatalisation of (k) in the 2nd person feminine serves a semantic function, which is the maintenance of clear male and female distinctions. As has been shown in sections 7.2.1 and 7.2.2, the medieval Arab grammarians typically gave much more attention to palatalisation in the 2nd person feminine than to word-stem /k/, hinting that palatalisation was originally somewhat less prominent in the word stem than in the suffix. Apparently the semantic need to make a distinction between males and females, which is presumed to have originally resulted in the development of palatalisation, is now inhibiting depalatalisation in the suffix, at least to some extent. Such considerations are not relevant to the phonological (de)palatalisation of (k) in word stems.

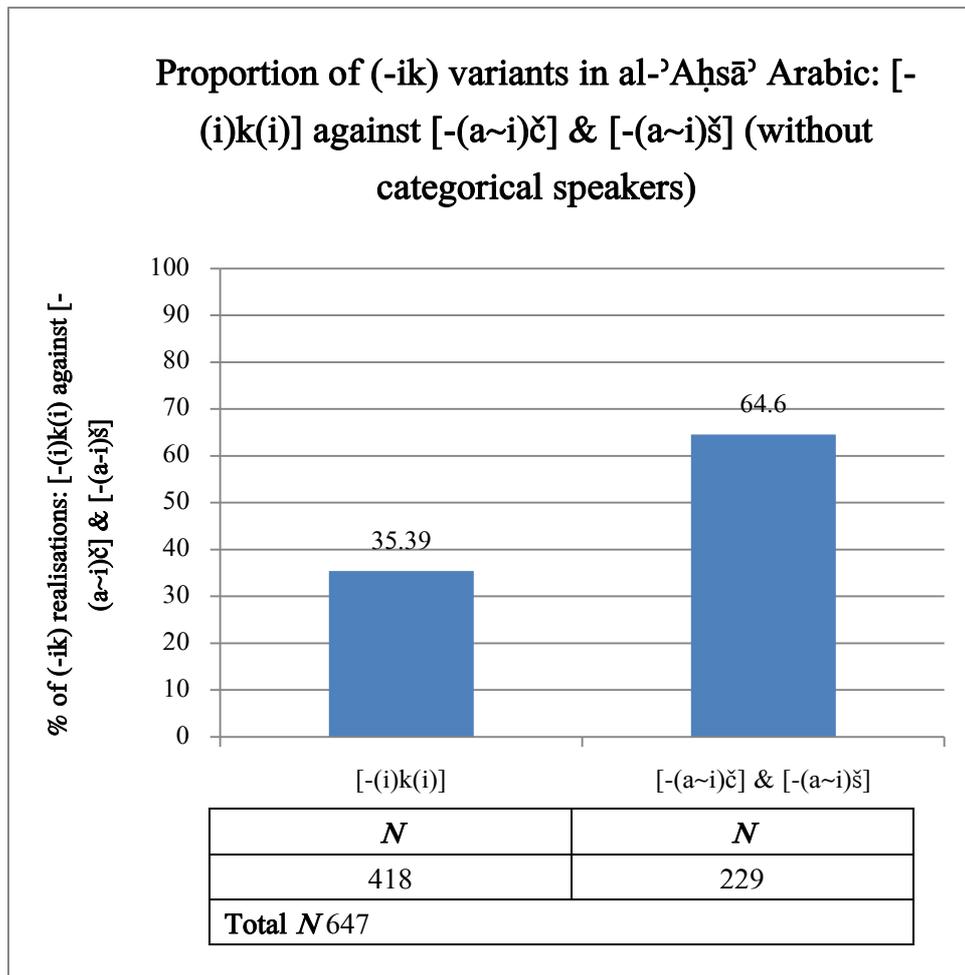


Figure 12 Overall distribution of (-ik) in al-ʿAḥsāʿ Arabic: [-i)k(i)] against [-(a~i)č] & [-(a~i)š] (without categorical speakers)

7.4.1.2 Mixed-effects analysis of (-ik): [-i)k(i)] against both [-(a~i)č] and [-(a~i)š]

The results of the (-ik) variable with [-i)k(i)] as the application value are illustrated at the end of this section, in Table 15. As mentioned above, two predictors achieve statistical significance in the analysis. These are socio-sectarian affiliation and age. Adolescent and middle-aged Sunnis advance depalatalisation, whereas young and elderly Shiites maintain the use of palatalised reflexes. The table also shows that gender does not have a

significant impact on the use of the [-i)k(i)] variant. More details of this are given below.

Findings show that socio-sectarian affiliation ($p = 0.0057$) plays a major role in the use of (-ik) in al-ʿAḥsāʾ dialect; Sunnis (1.012 log odds) are more likely to use the [-i)k(i)] variant than Shiites (-1.012 log odds). This supports the findings of (k) in word stems. With both variables, Sunnis show a closer approximation to the supra-local depalatalised variants and Shiites exhibit a stronger maintenance of the local palatalised variants. Previously, the two groups were reported to show different behaviour in the use of palatalised variants, i.e. Sunnis use [-(a~i)č]; whereas Shiites use [-(a~i)š] (cf. Holes, 1991). These differences between Sunnis and Shiites can be ascribed to their distinct historical origins, and to their later rather introverted social patterns of behaviour, which are largely based on endogamous marital relations. Apparently, a further distinction is arising, this time in terms of a move away from the local variants to the adoption of the supra-local variant [-i)k(i)]. The move of Sunnis towards the depalatalised variant is bolstered by a shared socio-sectarian affiliation with the majority of the population in Saudi Arabia. Shiites, on the other hand, seem more inclined to maintain local variants.

Results show that age ($p = 0.00876$) also has a significant effect on the use of (-ik). Adolescent (1.558 log odds) and middle-aged speakers (0.530) exhibit the greatest use of the [-i)k(i)] variant. As expected, elderly speakers (-1.595 log odds) demonstrate the lowest use of [-i)k(i)].

Surprisingly, young speakers (-0.492 log odds), who are mainly university students, were found to also show a limited use of [-*(i)k(i)*]. It is possible that among young speakers, there is a group of non-categorical speakers, who become loyal to the local [-*(a~i)č*] or [-*(a~i)š*] variants when they go to university. They are doing so in order to express pride in their own speech during communication with students from other cities (see quotes 7 and 8 in Appendix B). In this sense, palatalised variants may hold some form of covert prestige that signals local identity.

With this variable, gender was not found to bear statistical significance in influencing depalatalisation. In this regard, previous findings on other parts of Saudi Arabia are inconsistent. For instance, al-Azraqi (2007) found that males in Riyadh, ad-Dammām, Buraidah, Abhā, and Skāka tend to avoid the use of depalatalised variants, whereas Alessa (2008) found that female Najdī speakers in Jeddah typically use the depalatalised variant post-consonantly.

Unlike with *(k)* in word stems, the *(-ik)* variable is not significantly influenced by education within the elderly age group. As mentioned earlier, the communicative need to mark distinctions between males and females may prevent these changes from taking place. A comparison of the grand means of depalatalisation in the suffix and in the word-stem shows that the grand mean of *(-ik)* (0.354) is much lower than that of *(k)* in word stems (0.591) (see section 6.4.1.2). Together with findings on education, this supports the assumption that [-*(i)k(i)*] was introduced at a later stage in the dialect, after the majority of its speakers became educated.

Table 15 Mixed-effects results of (-i)k(i) against both [-a-i] and [-a-i]

Total N 647		Deviance 568.882	df 6	Grand mean 0.354	
Individual speaker standard deviation 1.541					
Factor group	Factors	Log odds	N	Proportion of application value	Centred factor weight
Socio-sectarian affiliation p = 0.0057	Sunni	1.012	352	0.435	0.733
	Shiite	-1.012	295	0.258	0.267
Age p = 0.00876	Adolescent	1.558	235	0.502	0.826
	Middle-aged	0.530	72	0.486	0.629
	Young	-0.492	141	0.298	0.379
	Elderly	-1.595	199	0.171	0.169
Not selected as significant: Gender					

Given that the (k), (g), and (-i)k(i) variables are all engaged in depalatalisation processes that involve age correlations suggestive of a change in progress, key issues related to the diffusion of depalatalisation will be discussed here. Some of these issues pertain to the source of the hypothesised unified Saudi koiné and its evolution. Others relate to the estimated time of emergence of the supra-local forms of the aforementioned variables into the dialect of al-ʿAḥsāʾ and the means through which they have diffused into it.

Riyadh was announced the capital City of Saudi Arabia in 1932. Ever since, it has grown from a relatively small town into an expansive metropolis that attracts people from all over Saudi Arabia. Some of the people who migrated into this area came from Ḥijāz, which is a much older historical

settlement than Riyadh. The original local linguistic variants of (k), (g), and (-a)k(i) in Riyadh are [ć], [dz], and [-(a~i)ć] respectively (cf. Prochazka, pp. 16-17) (see maps 2, 3, and 4)). In contrast, the Ḥijāzī variants are [k], [g], and [-(i)k(i)] respectively (Alessa, 2008) (see maps 2, 3, and 4). As a result of intense amounts of contact between speakers from other regions of Saudi Arabia and local speakers in Riyadh, a linguistic koiné started to develop, with local linguistic variants being replaced by supra-local ones (cf. al-Azraqi, 2007, p. 233). This has resulted in the widespread use of features that match or are closer to Modern Standard Arabic, i.e. in this case [k], [g], and [-(i)k(i)]. The [g] sound, which can be palatalised in the specific linguistic context of high front environments or in words that are part of a phonolexical set, e.g. *gidir* ‘pot’, does not exactly match the Modern Standard Arabic realisation [q], e.g. *qidir*. However, the [g] sound matches the local dialectal realisation of /q/ in other non-palatalised contexts, e.g. *gyās* ‘measurement’ (see quote 9 in Appendix B). In addition, [g] and [q] have more in common than [j], i.e. both [g] and [q] are dorsal stops, whereas [j] is a coronal affricate. The [g] realisation is also not represented in the Arabic alphabet and can be considered as a local realisation of < ق > (lit. /q/). However, [j] is supposed to represent another letter which is < ج > (lit. /j/), e.g. *jazīrah* ‘island’.

Unfortunately, due to the scarcity of evidence on the state of al-ʿAḥsāʾ dialect in the past, it is difficult to provide an exact estimate of when the depalatalised forms entered the dialect. Johnstone, in his description of /k/, /g/, and -ik in al-Hufūf in 1978, did not mention depalatalised variants. This

indicates that they were either non-present or not yet widespread in the dialect at that time. As a native of al-ʿAḥsāʾ, my anecdotal impression is that the [- (i)k(i)] variant suddenly became more prevalent in al-ʿAḥsāʾ Arabic during and after the 1990s. This is also remarked upon by some speakers in the present study (see quotes 10 and 11 in Appendix B). During that decade, the whole country witnessed several changes, especially in terms of economy, technology and communication. In order to understand the economic status of Saudi Arabia during the 1990s, it is first necessary to understand its economic situation prior to that time. The Saudi government witnessed an oil boom from 1974 to 1983, which was followed by a major economic recession. The government tried to overcome this financial crisis by stimulating the private sector. Then, in 1990, the Gulf War between Iraq and Kuwait took place. As a result of this conflict, the government attempted to compensate for the loss of Iraqi and Kuwaiti oil by increasing its own national oil production. Together with the flourishing of the private sector, this encouraged significant financial growth, which was further accelerated in the wake of the second Gulf War in 1991 (Field, 1996). The financial boom helped provide job opportunities for people belonging to different regional, sectarian, and tribal backgrounds, which facilitated greater contact between them. As stated earlier, one possible outcome of contact is dialect convergence, which involves levelling and loss of regional markers (cf. Trudgill, 1986, pp. 98–127) in favour of standard and supra-local features. Another factor that could have increased the elimination of marked variants is the repeated exposure via mass communication to Modern Standard Arabic and other Arabic dialects. After the Gulf War, new forms of mass media were introduced into Saudi Arabia. Of particular

importance was the adoption of satellite television, which rapidly and extensively exposed huge numbers of Saudis to Modern Standard Arabic, as well as to other Arabic dialects, such as Lebanese and Cairene. Other means of mass media were gradually introduced, including pagers, the internet, and mobile phones. Regarding the initial spread of the [k] and [g] variants in the dialect of al-ʿAḥsāʾ, my impression is that it emerged prior to [-(i)k(i)], i.e. during the 1980s, when higher education was introduced in al-ʿAḥsāʾ. This change provided greater exposure to Modern Standard Arabic and an increased intermingling of speakers from different areas of al-ʿAḥsāʾ and from other regions of Saudi Arabia. Some speakers in the present study of al-ʿAḥsāʾ have also remarked this (see quote 9 in Appendix B).

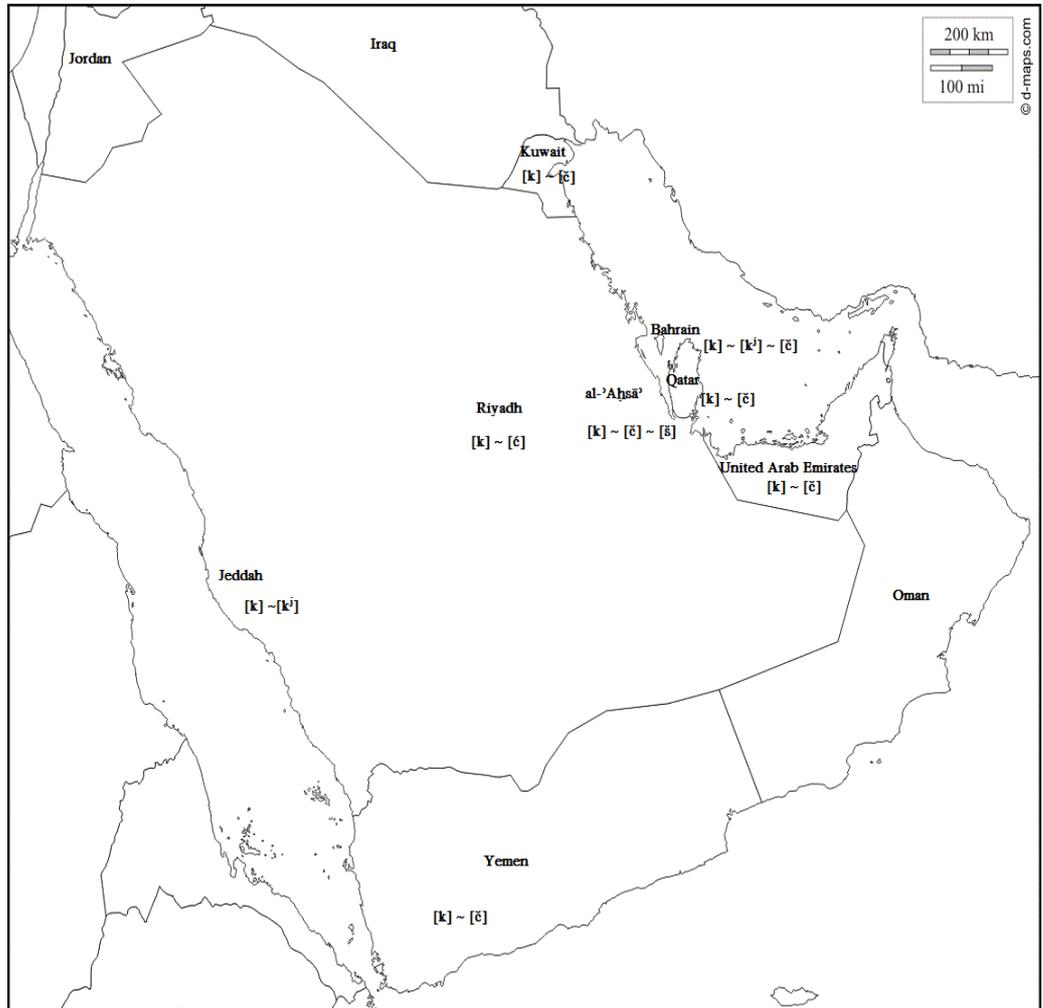
In relation to al-ʿAḥsāʾ dialect, the local realisations of (k), (g), and (-ik) are [č], [j] and [-(a~i)č / -(a~i)š] respectively (see maps 2, 3 and 4). The findings of the present study show a high level of adoption of the supra-local linguistic features, especially among Sunnis. As stated earlier, supra-local forms are considered to be part of a unified Saudi koiné that is assumed to be developing. Sunnis, in particular, have exhibited high awareness of this koiné, which they call *il-lahja il-beḏa* (lit. the white dialect) (see quotes 8, 11, and 12 in Appendix B). They perceive it as being influenced by Modern Standard Arabic (see quotes 9, 11, and 13 in Appendix B). Many Sunnis also believe that this dialect is mainly from Riyadh or Najd (see quotes 5, 8, 11, 12, 13, 14, and 15 in Appendix B), which they consider as being prestigious because it is the capital city and, as such, where the royal family, ministers, and other wealthy people reside (see quotes 11, 13, and 14 in Appendix B). Another

reason for the attachment of Sunnis to supra-local variants relates to the way that they feel embarrassed about the sectarian character of al-ʿAḥsāʾ city. Sunnis prefer to be less associated with Shiites, because they think that other Saudis look down on them. Sunnis talked about how people from al-ʿAḥsāʾ exert a deliberate effort to adopt the Saudi koiné because they do not want to feel less important than others, as well as because of a wish to bolster their identity as Saudis and be part of the wider Saudi community (see quotes 4, 5, and 6 in Appendix B). Of course, not all Sunnis share the same orientation, with some participants expressing pride in the al-ʿAḥsāʾ dialect, as well as opposition to any form of convergence with features from Riyadh (see quotes 8, 11, and 17 in Appendix B).

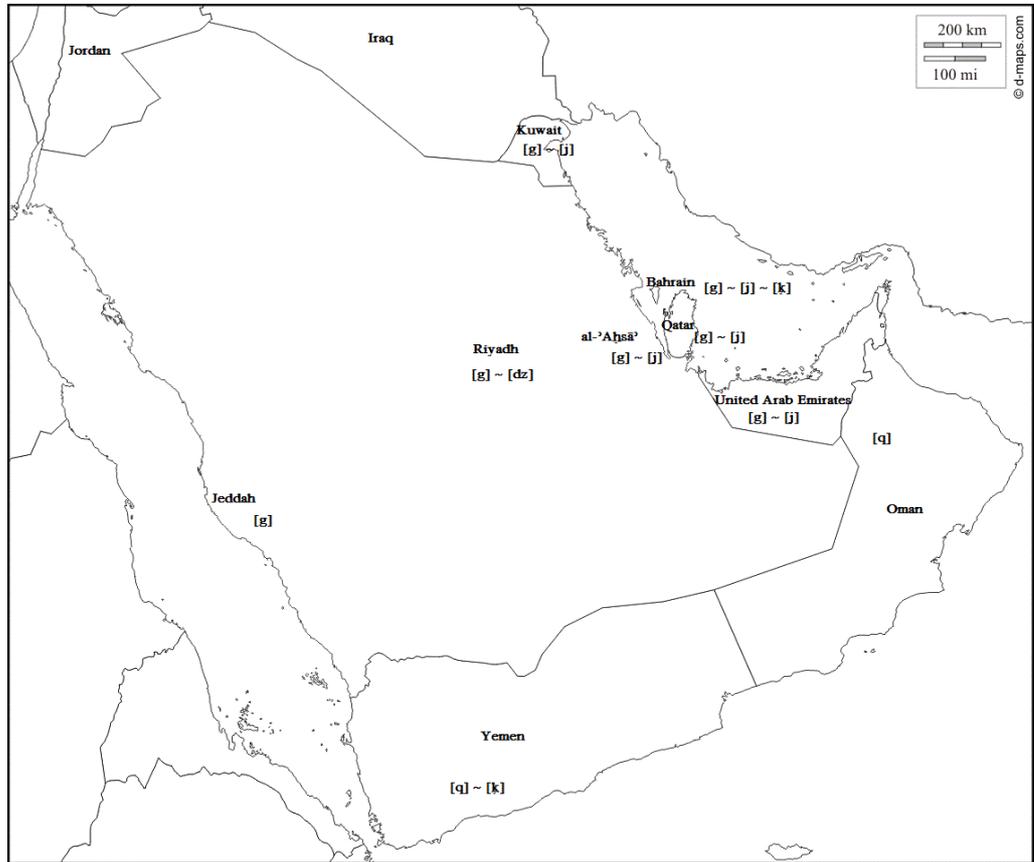
Speakers reported a number of stances regarding the means through which this koiné has diffused into their dialect. For example, some speakers said that they have a degree of contact with speakers from Riyadh, who are either friends at university or relatives (see quotes 8, 13, and 15 in Appendix B). It should be stated that seven Sunni speakers in the present study have reported that their mothers are from Ṣāgrā, a governorate within the Riyadh district. In addition, some Sunnis said that they are exposed to the Saudi koiné over the media. In particular, they observed that the koiné is used in Saudi TV series, most particularly *Ṭāš ma ṭāš* ‘the name of a famous Saudi TV series’ (lit. did the soda explode when shaken or not) and on YouTube videos (see quotes 11, 13, 14, and 15 in Appendix B). They also said that they hear it being used by Saudi announcers. Other means mentioned by participants are

through contact via social media applications, such as Messenger, Twitter, Instagram, and Snapchat (see quotes 8 and 11 in Appendix B).

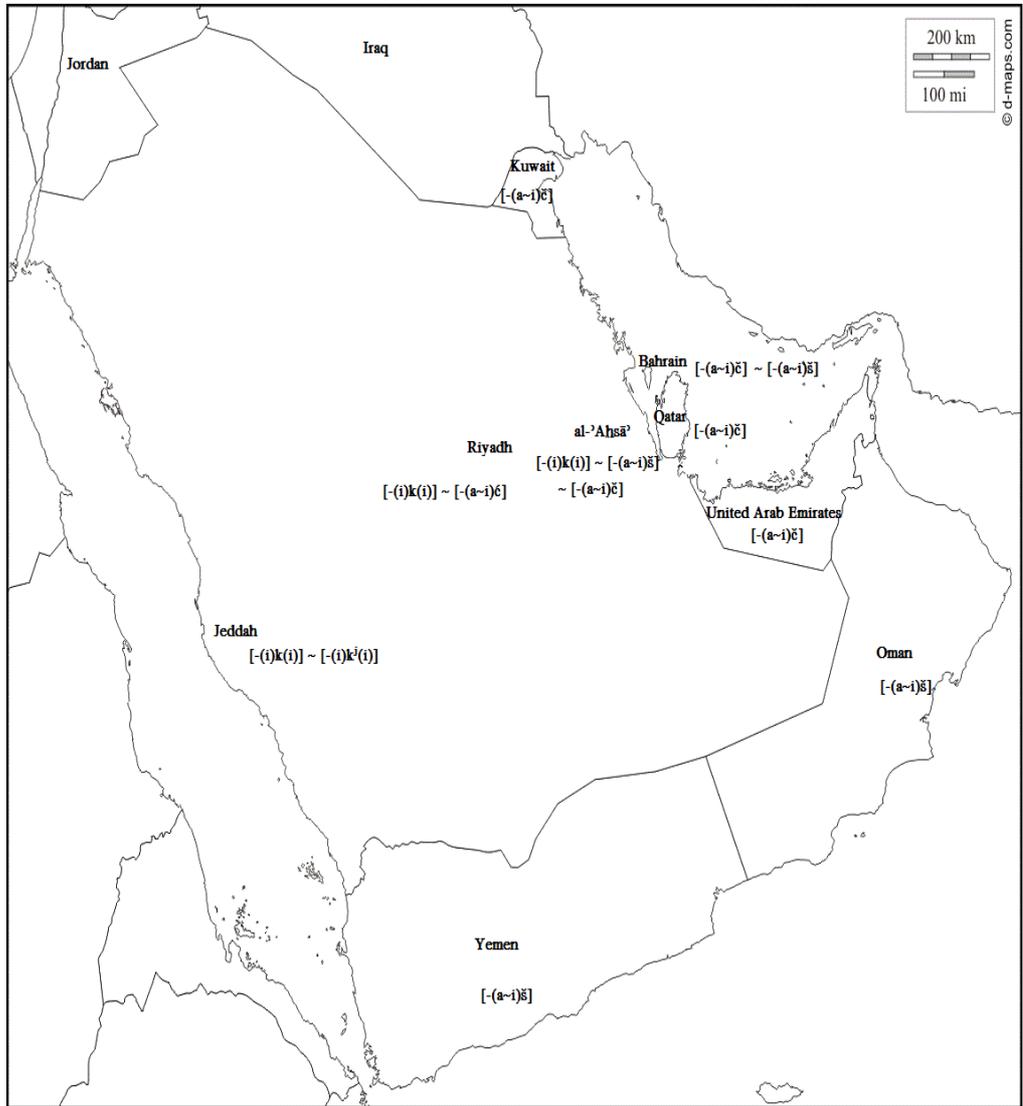
Many Shiites, on the other hand, have expressed their loyalty to the local dialect (see quotes 7, 18, 19, 20, and 21 in Appendix B). Unlike Sunnis, who seem to be extremely conscious of the unified Saudi koiné, many Shiites consider the [k], [g], and [-(i)k(i)] variants as now part of al-ʿAḥsāʿ Arabic (see quotes 20, 21, and 22 in Appendix B). However, some Shiites stated that it is better for them to keep the more local linguistic features, i.e. the forms about which they are more confident, because of a fear of being embarrassed if they have not acquired the new features successfully (see quote 20 in appendix B). The indirect remarks of Shiites on the locality of the [k], [g], and [-(i)k(i)] variants in the modern dialect of al-ʿAḥsāʿ, in addition to the findings of the present study, which show that Sunnis surpass Shiites by a considerable margin in the use of these linguistic features. This suggests that these features are percolating from Sunnis to Shiites via contact. Unfortunately, given that it was not possible to ask questions about the patterns of contact between Sunnis and Shiites, as this subject is considered a local taboo, it is not possible to assert that supra-local linguistic features are actually diffusing from Sunnis to Shiites in al-ʿAḥsāʿ.



Map 2 The distribution of /k/ in the Arabian Peninsula



Map 3 The distribution of /g/ in the Arabian Peninsula



Map 4 The distribution of *-ik* in the Arabian Peninsula

7.4.2 The (-ik) variable: [-(a~i)č] against [-(a~i)š]

The results of the present study show that [-(a~i)č] and [-(a~i)š] are almost equally used in the Arabic dialect of al-ʿAḥsāʾ. Their use is influenced by socio-sectarian affiliation and age. No significant gender differences were found in terms of their usage.

The total number of tokens elicited from both categorical and non-categorical speakers is 1282. After the removal of all tokens of [-(i)k(i)] and the removal of all tokens from speakers who do not alternate between [-(a~i)č] and [-(a~i)š], the remaining number of tokens is 790. In this section, the overall distribution of the [-(a~i)č] and [-(a~i)š] variants are given. After this, a discussion will be provided of the mixed-effects results with [-(a~i)č] as the application value.

7.4.2.1 Overall distribution of (-ik): [-(a~i)č] against [-(a~i)š]

Categorical and non-categorical speaker data for the (-ik) variable where [-(a~i)č] is tested against [-(a~i)š] in al-ʿAḥsāʾ Arabic are charted graphically in Figure 13. The raw token numbers are provided in the data table below the figure. As can be seen, the rate of the [-(a~i)č] reflex (46.7%) is relatively close to that of [-(a~i)š] (53.3%).

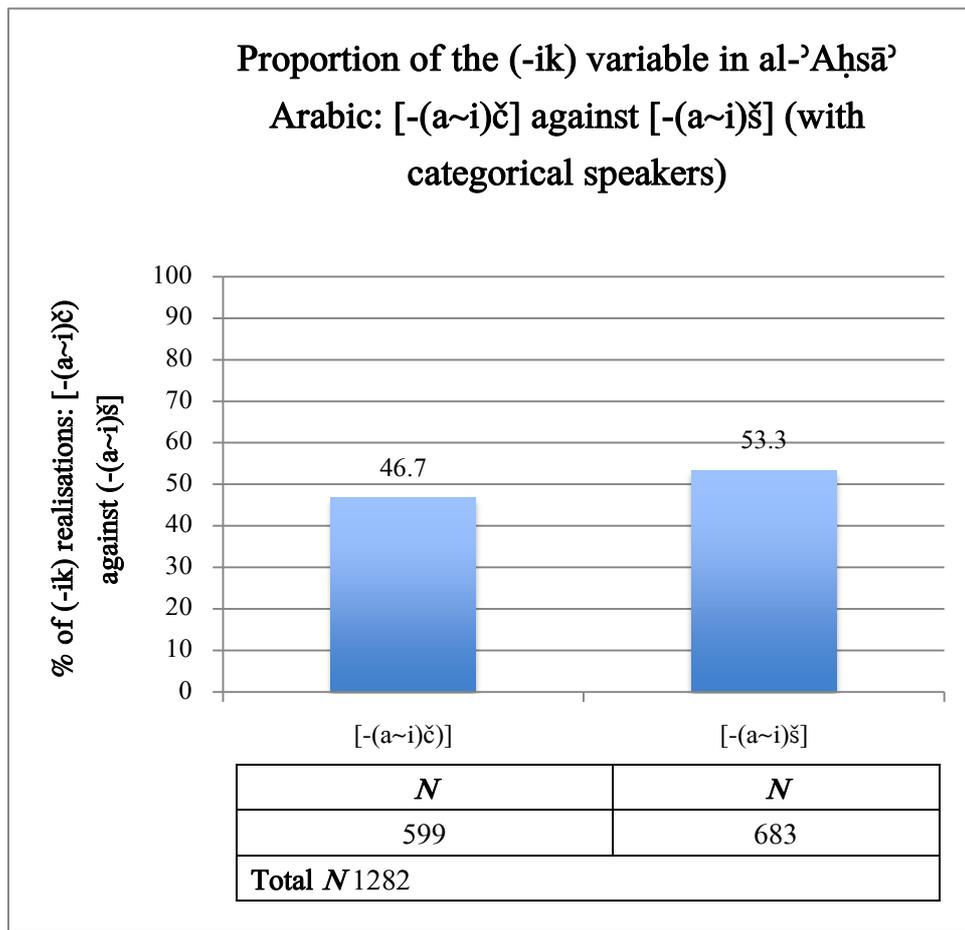


Figure 13 Overall distribution of (-ik) in al-'Aḥsā' Arabic: [-(a~i)č] against [-(a~i)š] (with categorical speakers)

Figure 14 illustrates the percentages of [-(a~i)č] and [-(a~i)š] as produced by non-categorical speakers in al-'Aḥsā'. It should be noted that the proportions of [-(a~i)č] and [-(a~i)š] are becoming more alike, i.e. the rate of the [-(a~i)č] (50.37%) reflex is almost equal to that of [-(a~i)š] (49.6%), than when non-categorical speakers were included, i.e. 46.7% for [-(a~i)č] and 53.3% for [-(a~i)š].

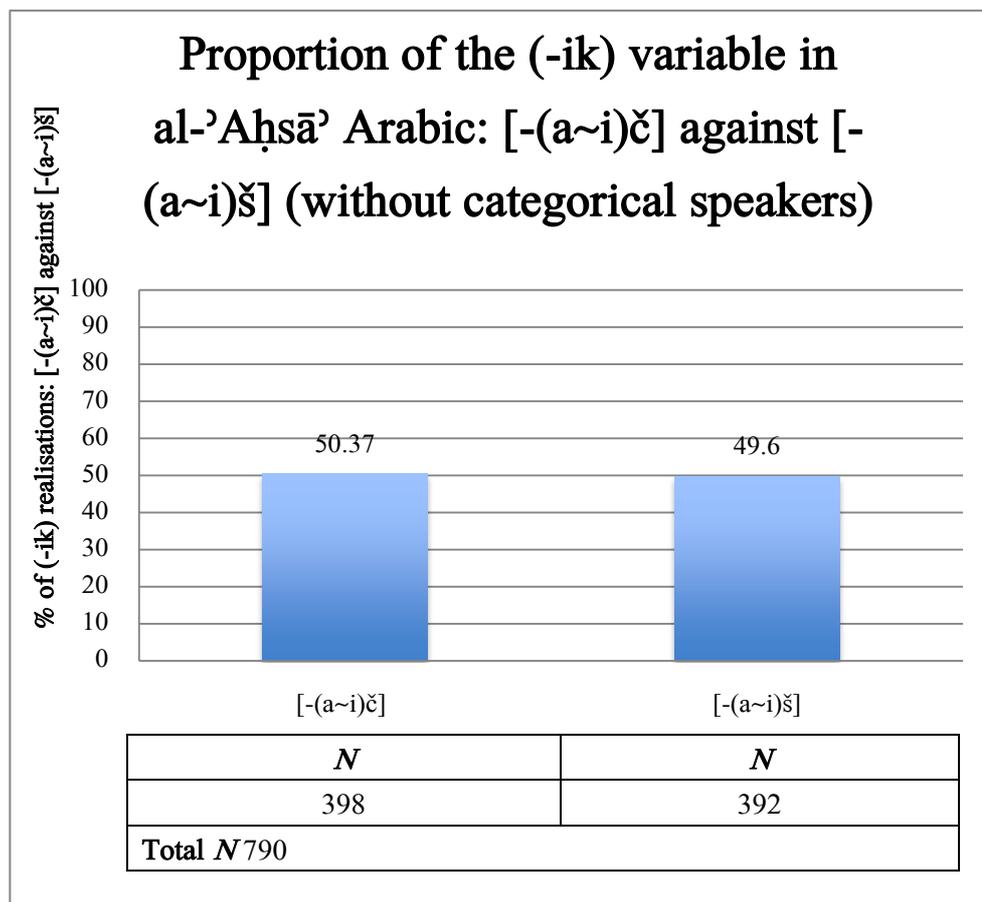


Figure 14 Overall distribution of (-ik) in al-ʿAḥsāʾ Arabic: [-(a~i)č] against [-(a~i)š] (without categorical speakers)

7.4.2.2 Mixed-effects Analysis of (-ik): [-(a~i)č] against [-(a~i)š]

Table 16 at the end of this section illustrates the mixed effects results of alternations between [-(a~i)č] and [-(a~i)š]. These reflexes are shown to be significantly socially stratified in terms of socio-sectarian affiliation and age. Sunnis belonging to age groups above adolescents were found to commonly use [-(a~i)č], whereas adolescent Shiites tend to use [-(a~i)š]. Gender was not found to have an influence on the choice of either of these reflexes among participants. More details of this are provided below.

Socio-sectarian affiliation ($p=0.000415$) was selected as the most significant constraint influencing the use of the $[-(a\sim i)\check{c}]$ and $[-(a\sim i)\check{s}]$ variants. Sunnis (0.902 log odds) were found to far surpass Shiites (-0.902 log odds) in the use of the $[-(a\sim i)\check{c}]$ variant. This confirms the previous statement by Holes (1987, pp. 108–110; 1991, pp. 653–658) that the $[-(a\sim i)\check{s}]$ reflex is a Shiite feature, whereas the $[-(a\sim i)\check{c}]$ reflex is a Sunni trait in both al-³Aḥsā' and Bahrain.¹⁴ In this sense, overlooking any shift towards the $[-(i)k(i)]$ variant, there seems to be a state of stable variation between Sunnis and Shiites in the use of the palatalised variants of the 2nd person singular feminine object/possessive suffix. This could potentially be attributed to the different ancient origins of both groups. As stated in section 7.2.3, the $[-(a\sim i)\check{s}]$ reflex is a 'southern feature' (Holes, 1991, pp. 653). More particularly, it is a dialectal feature of north and north east Yemen, and southern Saudi Arabia (Holes, 1991, pp. 653-654). In Yemeni Arabic, the $[-(a\sim i)\check{s}]$ reflex is a vestigial remain of Himyaritic and other south Arabian languages (Holes, 1991, p. 664). It is believed that some Yemeni people carried this feature with them during their migration to areas that include Bahrain and al-³Aḥsā' (Holes, 1991, p. 664). The descendents of these people comprise the Shiite group (Holes, 1991, p. 658). According to Ingham (1982) there were later extensive migrations from Najd to eastern settled lands, which were either movements of bulks of nomadic Bedouin groups or of families coming from settled Najdī areas. These are mainly Sunnis. According to Holes (1991) Old Arabic $-k(i)$ shifted first to $-i\check{c}$ then to $-i\check{c}$ in the Area of Najd. As such, it is

¹⁴ This is with the acknowledgement that Holes did not provide any statistical data to support his statement.

possible that Najdī migrations took place at the *-ič* phase, which they carried with them east.

It should be noted that some Shiite speakers reported themselves as having originally migrated from Najd. These groups of speakers have linguistically converged into other Shiites who use the $[-(a\sim i)\check{s}]$ reflex after intermingling with them, especially via marital relations.

The social factor selected as second most significant is age ($p=0.0212$). The results generally show that speakers from older age groups, including middle-aged (1.097 log odds), young (0.575 log odds), and elderly (0.396 log odds) tend to utilise $[-(a\sim i)\check{c}]$, whereas adolescents (-2.068 log odds) were found to exhibit the highest usage of the $[-(a\sim i)\check{s}]$ reflex. From a historical perspective the $[-(a\sim i)\check{s}]$ variant is considered as being an earlier and therefore more conservative reflex in al-ʿAḥsāʾ dialect than the relatively innovative $[-(a\sim i)\check{c}]$ form, at least to Shiites. It could therefore be reasonably expected that Shiite adolescents would opt for innovative rather than conservative forms. Nonetheless, Shiite adolescents may not necessarily find forms considered to be prestigious by the Sunnis as appealing as their own slang vernacular, which could include linguistically conservative forms. Slang vernacular may convey a different type of prestige, specifically a covert one that is related to an expression of pride in one's own dialect and a rejection of the linguistic norms of others (see quotes 18, 20, and 21 in Appendix B). This type of vernacular is typically associated with toughness, street smartness, or anti-establishment stance (Androutsopoulos & Georgakopoulou, 2003, p. 4). It

can also symbolise the rejection of mainstream society and attachment to a local, non-mainstream community (Eckert, 1989a, p. 67). Some adolescent and young Sunni males expressed the same stance as the adolescent Shiites with regards to the preservation of their own linguistic features. In the case of the Sunni participants, the maintenance of [-(a~i)č] against the shift towards [-(i)k(i)], was considered as signalling the abandonment of one's own origin and an association with what they perceived as fake and unmanly behaviour (see quotes 15 and 16 in Appendix B).

Returning to the present findings, the use of [-(a~i)č] was found not to follow a linear progression as we move from young to elderly speakers. Instead, there seems to be a high degree of cross-over. Middle-aged followed by young speakers showed the highest use of the [-(a~i)č] variant. Elderly speakers, though they generally use the [-(a~i)č] variant, are closer to the periphery than middle-aged and young speakers. Adolescents (-2.068 log odds) exhibit the lowest use of the [-(a~i)č] variant. Similar age patterns can be seen in Trudgill's study (2002), which compares real-time findings on a number of variables in Norwich to earlier apparent time findings obtained in 1974. One of the stable variables he investigated was the (-iŋ) variable, which could be realised as [-ŋ] or [-n]. He found adolescents to be highly associated with the non-canonical form, namely the traditional local variant [-n], in comparison to middle-aged speakers, who seemed to have become more attached to mainstream norms, i.e. the [-ŋ] form. Trudgill (2002) argues that a change in progress would not typically involve such an unbalanced distribution across age groups and that such symmetrical curvilinear patterns

can be typically found with age-graded patterns of variation common to stable variables. In relation to the present findings, the non-linear age results seem to indicate that alternations between [-(a~i)č] and [-(a~i)š] are stable. Nonetheless, the only way we can rule out the possibility of an ongoing change would be through a future study against which present findings can be compared.

The relative stability of [-(a~i)č] and [-(a~i)š] is noticed by some speakers, who associate them with socio-sectarian affiliation and age. For instance, multiple Sunni speakers have considered [-(a~i)č] and [-(a~i)š] as stable and original features of al-ʿAḥsāʾ dialect. They have also noted that [-(a~i)č] is more common among Sunnis; whereas [-(a~i)š] is typical of Shiites (see quotes 23, 24, 25, and 26 in Appendix B). In addition, one young Sunni female stated that [-(a~i)š] is extremely common among the young generation of Sunnis (see quote 26 in Appendix B). Another noted that [-(a~i)č] is common among middle-aged speakers, whereas [-(a~i)š] is typical of elderly speakers (see quote 25 in Appendix B).

Just as with the first-stage analysis, gender was not selected as being significant at this stage.

Table 16 Mixed-effects results of (-ik): [-(a~i)č] against [-(a~i)š]

Total N 790	Deviance 793.438	df 6	Grand mean 0.504		
Individual speaker standard deviation 1.193					
Factor group	Factors	Log odds	N	Proportion of application value	Centred factor weight
Socio-sectarian affiliation p=0.000415	Sunni	0.902	364	0.728	0.711
	Shiite	-0.902	426	0.312	0.289
Age p=0.0212	Middle-aged	1.097	205	0.678	0.75
	Young	0.575	90	0.500	0.64
	Elderly	0.396	412	0.507	0.598
	Adolescent	-2.068	83	0.060	0.112
Not selected as significant: Gender					

7.5 Conclusion

In this chapter, a variationist account of the 2nd person feminine object/possessive pronoun in al-ʿAḥsāʿ Arabic has been given. Generally speaking, depalatalisation of the 2nd person feminine has been found to be less advanced in the dialect than depalatalisation in word stems. Maintenance of palatalised variants is assumed to be occurring in order to preserve the distinction between male and female addressees. Additionally, and on a general basis, the morphophonemic variant [-(a~i)š] was found to be much more commonly used in al-ʿAḥsāʿ Arabic than was the voiceless palato-alveolar fricative variant [š] of (k) found in word stems.

The 2nd person feminine suffix is found, through logistic regression analysis, to be socially stratified in terms of socio-sectarian affiliation and age. First, there seems to be a form of stable variation in the use of [-(a~i)č]

and [-(a~i)š] reflexes. Sunni middle-aged speakers most frequently use [-(a~i)č], followed by young and elderly speakers. In contrast, adolescent Shiites exhibit the highest use of [-(a~i)š]. This kind of stable variation reveals a pattern of divergence between Sunnis and Shiites. Alongside this variation, a shift has been detected towards [-(i)k(i)], which is the putative supra-local variant. This move is advanced by adolescent and middle-aged Sunnis, while palatalised variants are maintained by both young and elderly Shiites. Qualitative evidence showed that Sunnis have a conscious awareness regarding the linguistic features of the putative supra-local koiné, which they perceive as diffusing from Riyadh. They described their access to this variety as being primarily through contact with people from Riyadh, either physically or over the social media, supplemented by continuous exposure to the variety via mass media. Their assimilation with supra-local features is further supported by a standardness motivation, especially given that supra-local features match or are much closer to Modern Standard Arabic than local variants. This suggests that Sunnis wish to distance themselves from Shiites and to strongly connect with the wider Saudi Sunni community. Shiites, on the other hand, are less aware of this koiné. Many of the participants stated that they consider these linguistic features as being part of the modern al-^ʿAḥsāʾ dialect. Although Shiites have not directly expressed that they are adopting the variety from Sunnis, the findings of the present study support this assumption, especially given that Sunnis show a much higher usage of the supra-local features than Shiites. Shiites also expressed a lack of confidence in their ability to successfully acquire these variants, accompanied by a strong pride in their command of their own forms.

In this study, young speakers are mostly university students who are approximating elderly speakers in their use of the local palatalised variants. They are doing so because the use of local variants carries a form of covert prestige for this group. As such, the variants are used to express pride in what is local in a setting that includes speakers belonging to different areas of Saudi Arabia.

Chapter 8 The (y) variable

8.1 Introduction

This chapter deals with variation in the realisation of (y) amongst al-ʿAḥsāʾ speakers and its possible links with social factors. In al-ʿAḥsāʾ Arabic, (y) may be realised as the voiced velar/uvular fricatives [ɣ] and [ʁ], which are henceforth conflated to [ɣ], as the difference between them is not a major concern in the present study, or a voiceless uvular stop [q]. The (y) variable may possibly be realised as [ɟ] but this is conflated with [q] in the present study (see section 8.3.2 for reasons for this). Stopping of /y/ to [q] or [ɟ], is widespread in Gulf dialects (cf. al-Sulaiti, 1993, p. 7; al-Tajir, 1982, p. 138; Holes, 1987, p. 36; Johnstone, 1967, p. 20; Maṭar, 1969) as well as in Sudanese Arabic (cf. Dickins, 2007, p. 43). Previous work on Bahraini and Kuwaiti dialects have shown that stopping of (y) can index social meaning related to factors that include socio-sectarian affiliation, ethnicity, age, and gender (cf. al-Qouz, 2009; Holes, 1987; Taqi, 2010). Like the remaining dialects of the Gulf, the dialect of al-ʿAḥsāʾ has received little or no attention in this regard. This is unfortunate, since al-ʿAḥsāʾ Arabic represents a very interesting field for sociolinguistic research and particularly for this variable. The location of al-ʿAḥsāʾ on the coast of the Arabian Gulf has made it subject to influences from other Gulf dialects which use [q], as well as Persian which uses [ɟ], which has probably been perceived as [q] in al-ʿAḥsāʾ. The [q] realisation has been previously reported to be the local form of /y/ in al-ʿAḥsāʾ Arabic (Prochazka, 1988, p. 15). The dialect of al-ʿAḥsāʾ seems to be under pressure to standardise the pronunciation of (y) and to follow the norms

of the assumed to be developing supra-local Saudi variety. A further reason for the study of this variant relates to the unique social setting of al-³Aḥsā', which consists of two large groups of Sunnis and Shiites, the size of which is rarely found elsewhere in Saudi Arabia. This is especially true if results are compared with the findings of studies conducted in Bahrain, which has similar socio-sectarian groupings.

The present chapter aims to fill these gaps in existing research and to describe the status of the (y) variable in relation to the social factors of socio-sectarian affiliation (Sunnis vs. Shiites), age (adolescent and young, middle-aged, or old), and gender (male vs. female). In the rest of this chapter, the background of the (y) variable will first be described, including an overview of its linguistic and social context (section 8.2). Sections 8.3.1 and 8.3.2 outline the specific methodology used for this variable, above and beyond the general methodology for this study outlined in Chapter 3. Then in section 8.4.1, a description is given of the overall distribution of the [y] and [q] variants. This is followed by the findings of the mixed-effects model, which is fitted to the random effect of individual speakers, as well as the results of the fixed-effects model. Each section includes a discussion of the findings of this study, in light of previous research.

Overall distribution results show that [y] is the dominant variant in al-³Aḥsā' Arabic. Mixed-effects findings generally indicate that gender is the single most powerful predictor of (y) use. Taking into consideration by-speaker effects, socio-sectarian affiliation and age do not seem to have any

significant impact on (y). When the random-effects factor of individual speaker was removed from the analysis and a fixed-effects analysis was conducted, results changed substantially. The standard and prestigious [y] variant appeared to be widely used by old and middle-aged Sunni males. On the other hand, the non-standard [q] variant was preferred by adolescent and young Shiite females. Though mixed-effects results are claimed to yield more accurate results (Johnson, 2009), fixed-effects findings could also be considered as suggestive of possible links between (y) and socio-sectarian affiliation and age.

8.2 Review of previous studies

As with previous chapters, an overview of the original local phonological process will be given first. The review will be in terms of the occurrence of stopping in some Arabic dialects or similar occurrences in other languages. Following this a discussion will be provided of any possible linguistic constraints governing this process in light of previous research. Social constraints influencing alternations between [y] and [G] or [q] in Arabic will be reported afterwards.

8.2.1 Stopping of /y/ in Arabic and similar processes in other languages

This section will offer a description of the phonological process involved in the change from [y] to [G] or [q]. Following this, examples of similar processes in other languages will be given. Then, an overview will be

presented of the way in which this phonological process is manifested in Arabic.

The phonological process by which [ɣ] is changed to [q] can be described in terms of manner, phonation, and place. Examining this from the manner perspective, the change from [ɣ] to [q] involves stopping, while the shift from [q] to [ɣ] leads to frication. In terms of phonation, the difference between [ɣ] and [q] is canonically described in terms of the presence or absence of voicing. However, Watson & Heselwood (forthcoming) suggest that phonation distinctions in Arabic and Modern South Arabian languages should, instead, be based on the presence or absence of voiceless breath or turbulent airflow. Looking at place, the shift from velar [ɣ] to uvular [q] requires backing; the reverse process leads to fronting. However, the move from uvular [ɣ] to uvular [q], or the reverse, requires relatively no change in place of articulation.

With regards to the closely relevant change from [ɣ] to [G] and the reverse, which is claimed to be found in other Gulf Arabic dialects, the transformation can be depicted in relation to manner and place, as both are voiced or breathed. In terms of manner, the change from [ɣ] to [G] is considered a form of stopping; the opposite process being frication. In relation to place, the movement from velar [ɣ] to uvular [G] involves backing, whereas the movement from [G] to [ɣ] can be described as fronting. No change in place is found in the movement from uvular [ɣ] to uvular [G] or vice versa.

Given the complications involved above, it seems better to focus on manner of articulation, i.e. stopping or frication, to describe the processes by which the velar/uvular [ɣ] turns into either [q] or [G], or the other way around. The linguistic constraints on the use of the (ɣ) variable will also be considered from the perspective of stopping, a discussion of which is provided in the next section. Shifts from [ɣ] to [G] or [q] are not very common in languages other than Arabic. As such, a review of similar processes of stopping in other phonemes will be discussed below.

Stopping is a process in which a stop is substituted for a fricative or an affricate (Khan, 1982). Stopping of medial and final /θ/ to /t/ is attested in Detroit African American English. This process is highly lexicalised as it takes place mainly with the words *with* and *nothing* (W. Wolfram, 1969). In many urban Arabic dialects, for example Damascene Arabic, /θ/ and /ð/ are typically realised as [t] and [d] respectively, e.g. **θalj* > *talj* ‘ice’, **hāḏa* > *hāda* ‘this’ (Daher, 1999, p. 164).

In the context of /ɣ/ stopping, Maṭar (1969) states that [q] realisations of /ɣ/ are not historically attributed to a specific tribe. Nonetheless, he points out that dictionaries of Classical Arabic have many words in which [q] and [ɣ] are used interchangeably, e.g. *qulfā* and *ɣulfā* ‘foreskin’, *tazayyaqa* and *tazayyaya* ‘to adorn oneself’, indicating that these alternations are relatively ancient. In modern dialects, [q] and/or [G] realisations are attested in Bahrain (Holes, 1987, p. 36), Kuwait (Maṭar, 1969, 1970, p. 12; Taqi, 2010, p. 108), Baghdad (Maṭar, 1969), Qatar (al-Sulaiti, 1993, p. 7), Sudan (Dickins, 2007,

p. 43), and Khuzestan (Ingham, 2007, p. 573). Gulf dialects might be influenced by Persian in which the graphemes < غ > and < ق > represent one sound, the voiced uvular stop [G] (Rees, 2008, p. 128). In Arabic, the < غ > and < ق > graphemes are used to represent /ɣ/ and /q/ respectively.

8.2.2 Linguistic constraints on the use of /ɣ/

In Gulf dialects, there does not seem to be any phonological conditioning for this variable (cf. al-Qouuz, 2009; Holes, 1987; Taqi, 2010). By contrast, in Khuzestan Arabic the realisation of /ɣ/ as [q] seems to be restricted to word-initial positions, e.g. *qayr* ~ *yayr* ‘different’ (Ingham, 2007, p. 573). By contrast, in Sudanese Arabic this process tends to take place word finally (Dickins, 2007, p. 43).

8.2.3 Social constraints on the (ɣ) variable

Very few studies have examined the role of social factors in stratifying (ɣ) in Arabic dialects. In this section, three studies will be reviewed, two of which were conducted in Bahrain and the third in Kuwait.

Holes (1987, pp. 78–80) studied the (ɣ) variable among Sunnis and Shiites in Bahrain. Although the [q] variant (in which realisations of [G] and [q] are conflated) is a non-standard variant conflicting with Modern Standard Arabic [ɣ], it is considered a high-status variant because of its association with the ruling Sunni group. On the other hand, albeit coinciding with Modern Standard Arabic, [ɣ] is considered a low-status variant because of its attachment to Shiites. Holes found the majority of Shiites to be categorically

using [ɣ], except for some literate speakers who were making a relatively weak shift to [q]. He explains their shift in terms of the influences of the high-status group which could override the influence of Modern Standard Arabic. On the other hand, illiterate Sunnis exhibit a great deal of dialectal preservation of [q], whereas literate Sunnis are replacing dialectal [q] with standard [ɣ]. According to Holes, the Sunnis' move away from dialectal [q] to standard [ɣ] is prompted by other changes in the internal phonological system of the Sunni dialect. These changes are caused by Modern Standard Arabic influences. He explains this by stating that the switch of literate Sunnis to [ɣ] is closely related to their shift away from the dialectal realisations [ɟ] and [j] of standard /q/ in lexical items that have Modern Standard Arabic morpho-semantic congruity. In order to avoid blurring distinctions between standard /q/ and dialectal [q] (as a realisation of /ɣ/), dialectal [q] is therefore being replaced by standard [ɣ].

Almost two decades later, al-Qouuz (2009) re-examined the (ɣ) variable in the speech of Sunni and Shiite school students (aged 6–17) in Bahrain. They were of both genders and belonged to upper, middle, and lower classes. They attended either state or private schools. Al-Qouuz did not find any significant effects in terms of class or gender. Nonetheless, she found significant correlations with sect, age, and type of school. She found that Shiite school students categorically use the [ɣ] variant. Their use of this heritage variant was found to be stable and not influenced by any form of contact with Sunnis throughout their schooling. Among Sunnis, a general decline was detected in the use of the heritage [q] variant. Al-Qouuz found that

(6–7) year old students exhibit a low use of [q] in comparison to the Sunni speakers reported by Holes (1987) two decades earlier. She also found the [q] variant to be more common among state school students belonging to ages 6–8 and 9–11 than private school students aged 12–14 and 15–17. She considers the decline in [q] use a direct result of contact not only with Shiites but also with other social groups living in Bahrain, such as Hwila and ‘Ajam speakers who all use the [ɣ] variant. So, the [ɣ] variant is generally more common in al-Manāma than [q]. The shift towards [ɣ] is further precipitated by the general awareness of the markedness of the [q] variant. Shiites, in particular, consider it to be illiterate and uncultured. Though the [ɣ] variant agrees with Modern Standard Arabic, Al-Qouz (2009) rules out the possibility of educational influences. She says that speakers who exhibit [q] attend government schools using Modern Standard Arabic as a medium of interaction; whereas speakers showing a high use of [ɣ] go to private English-speaking schools. Nonetheless, she does not recognise that education and use of Modern Standard Arabic may not necessarily coincide with genuine standardisation. Despite teachers using Modern Standard Arabic as a medium of interaction, they may not necessarily pronounce [ɣ] accurately. Holes (2004) has discussed regional differences in the use of Modern Standard Arabic in the Arab world at the phonological level. For instance, it is often the case that in Cairene Modern Standard Arabic, the interdental fricatives /θ/ and /ð/ are replaced with their corresponding colloquial phonemes /s/ and /z/ even in careful Modern Standard Arabic reading.

Taqi (2010) studied linguistic variation in the use of (y) in relation to ethnicity (Najdī vs. ‘Ajmī), age (young, middle-aged or elderly) and gender (male vs. female) in the speech of Kuwaitis. She found ethnicity to be the most significant factor determining the use of (y) (Taqi, 2010, p. 186). Among Najdī speakers, [q] is a dominant variant (Taqi, 2010, p. 186). On the other hand, ‘Ajmī speakers were found to primarily use [y] (Taqi, 2010, p. 186). Age on its own was not found to have a significant influence on the use of (y) (Taqi, 2010, p. 187). Nonetheless, age was found to significantly interact with ethnicity (Taqi, 2010, p. 187). Apparently, there is a decline in the use of [q] as we move from elderly to young Najdī speakers (Taqi, 2010, p. 188). By contrast, [q] realizations tend to increase as we go from middle-aged to young ‘Ajmī speakers; with elderly speakers never using [q] (Taqi, 2010, p. 188). In terms of gender, females in both groups showed a high use of [q] in comparison to their male counterparts (Taqi, 2010, p. 189). Gender was also found to interact with ethnicity and age (Taqi, 2010, p. 189). Among Najdī speakers, old females showed the highest use of [q], while young males used it the least (Taqi, 2010, p. 190). In relation to ‘Ajmī speakers, young females exhibited the greatest use of [q] (Taqi, 2010, p. 190). According to Taqi (2010, p. 198), the non-standard [q] variant is becoming a source of embarrassment to Najdī speakers, especially males. She (2010, p. 199) attributes this to education, media and contact. Conversely, likely because of its attachment to the prestigious Najdī group, it is becoming a trend among ‘Ajmī speakers, especially young females.

Previous sociolinguistic findings thus indicate that the (y) variable can index social meaning related to sect, ethnicity, age, gender, literacy, and type of school.

8.3 The (y) variable data

In this section, the variable context of (y) will be identified. In other words, variants will be specified for (y) and the context in which they alternate. This will be supplemented by an illustration of the factors and levels within them.

8.3.1 Circumscribing variable context

In al-ʿAḥsāʾ Arabic, the (y) variable may be realised as [ɣ] or [q]. This variation may be found word-initially, e.g. *yada* ~ *qada* ‘lunch’, word-medially, e.g. *ḍayt* ~ *ḍaqt* ‘pressure’, as well as word-finally, e.g. *ṣibiy* ~ *ṣibiq* ‘paint’. While looking at the data, I noticed that variation in the use of [ɣ] or [q] is extremely recessive, as it only occurs in a limited set of lexical items. As such, only these items, shown in Table C7 in Appendix C, were included in the analysis (see sections 5.1.2.1 and 6.3.1 for reasons behind including only non-categorical lexical items). Some of the chosen lexis are Modern Standard Arabic loan words, e.g. *aqlaq* ‘he closed’, *fāriqa* ‘empty’, and *mutafarriqa* ‘unengaged or unoccupied’. Nevertheless, there were only a limited number of tokens of Modern Standard Arabic loan words in the data. Other lexical items are borrowed from other languages, e.g. *juqrāfya* (English *geography*), *qāz* (English *gas*), *šmāq* ‘men head scarf’ (Turkish *yaşmay*). These words have now become part of Modern Standard Arabic and are

written with the < ڍ > grapheme standing for [ɣ]. These should be distinguished from another type of loan words that have become Arabised but with < ڍ > standing for /q/. This kind of word has two realisations, namely [q] and [ɣ], e.g. *burtuqāl* ~ *burtuɣāl* ‘orange’ (attributed to Portuguese), and *baqlāwa* ~ *baylāwa* (Turkish baklava). These words were not included in the analysis because they are related to the (q), rather than the (ɣ) variable. The majority of the remaining lexical items are colloquial words. In these words, it has been noticed that derivations of the same root tend to maintain the same [ɣ] and [q] alternations, e.g. *mašqūl* ‘busy’, *mašāqil* ‘tasks’, *mašqal* ‘salon’, and *ištaqal* ‘he worked’.

Alternations between [ɣ], [g] and [q] must be distinguished from the realisation of /g/ (< Old Arabic /q/) as [ɣ], e.g. *gāsī* ~ *ɣāsī* ‘cruel’ which occurs in Dubai (Johnstone, 1967), the Jordanian-Syrian desert (Cantineau, 1936), Kuwait (Johnstone, 1967), and Bahrain (al-Tajir, 1982, p. 48). In these dialects, alternations between [g] and [ɣ] occur in what can be considered as being ‘core’ dialectal lexical items. This process was not attested in the current corpus of al-ʿAḥsāʿ Arabic.

The second issue to be addressed in this section pertains to speaker categoricity. Table 17 shows the number of categorical speakers according to socio-sectarian affiliation, age, and gender. In total, there were twenty-seven categorical speakers who only used [ɣ]: twenty-five Sunnis (92.5%), and only two Shiites (7.4%). One of the Shiites is a middle-aged male who works in a grocery shop in a Sunni neighbourhood. This speaker was reported in

section 7.3.1 to be categorically using the [-(a~i)č] variant, which is generally associated with Sunni speech. The second is an elderly Shiite female who, while illiterate, was found to categorically use the standard [ɣ] variant. There were no elderly categorical speakers among Sunnis. The socio-sectarian affiliation background of categorical speakers seems to reflect the same pattern obtained in the fixed-effects results (see section 8.4), wherein Sunnis are found to surpass Shiites in the use of [ɣ]. Although there was only one elderly categorical speaker, elderly speakers demonstrated the highest use of [ɣ] in comparison to other age groups in the fixed-effects results.

After the removal of all categorical speakers, the remaining number of non-categorical speakers is 71.

Table 17 Categorical speakers of (ɣ): Speakers using only [ɣ]

Sunni	adolescent		Young		Middle-aged		Elderly		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Male	5	18.5	4	14.8	3	11.1	0	0	12	44.4
Female	4	14.8	5	18.5	4	14.8	0	0	13	48.1
Total	9	33.3	9	33.3	7	25.9	0	0	25	92.5
Shiite	Adolescents		Young		Mid		Elderly		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Male	0	0	0	0	1	3.7	0	0	1	3.7
Female	0	0	0	0	0	0	1	3.7	1	3.7
Total	0	0	0	0	1	3.7	1	3.7	2	7.4
Grand total 27										

8.3.2 Coding

In this section, dependent and independent factors will be specified. The (γ) variable involves the variants [ɣ], [ʏ], and [q]. In this regard, it should be noted that Praat analyses were conducted on several randomly selected tokens of [q] taken from various speakers. All of the selected tokens showed that [q] is voiceless, i.e. none was the voiced [G]. Unfortunately, time and effort constraints precluded the possibility of performing an analysis of all the tokens investigated in the present study. However, if there was any degree of voicing involved in some tokens which were mistakenly not considered, then they should be considered as conflated with [q] based on the fact that both of them are stops. The [ɣ] and [ʏ] variants were conflated based on the grounds that they are both voiced fricatives. Another reason for such conflation is to avoid having multinomial variants that would necessitate the use of split analysis. Given that there were many categorical speakers, and that this process is highly lexicalised, further reductions of the number of tokens through split analysis does not seem likely to lead to any significant results.

As with other factors, analysis of (γ) initially consisted of as many social factors as possible (see sections 8.3.2 and 6.3.2). However, only three factors were eventually considered: socio-sectarian affiliation (Sunni vs. Shiite), gender (male vs. female), and age (adolescent & young, middle-aged, or elderly). See Table 3 for the number of participants in each factor level. Adolescent and young speakers exhibited similar behaviour and as such were conflated. With regards to elderly speakers, education was not found to have

an influence on their use of (ɣ), therefore education was not considered in the analysis. As with other variables, confluents and eliminations were based on comparisons of models and finding the best fit for the data.

Previous research suggests that stopping of (ɣ) is phonologically unconditioned in Bahrain and Kuwait (cf. al-Qouzi, 2009; Holes, 1987; Taqi, 2010). Together with the fact that there were no signs of a phonetic environment influence on (ɣ) stopping in the present data, this led to the exclusion of the phonetic environment from the analysis. Past findings have also demonstrated that (ɣ) stopping is bound to initial position in Khuzestan Arabic (Ingham, 2007, p. 573), as well as to the final position in Sudanese Arabic (Dickins, 2007). It was therefore deemed of potential interest to examine the influence of position in the word (initial, medial, or final) on the stopping of (ɣ) in the Arabic dialect of al-ʿAḥsāʾ.

Given the relatively large number of variables investigated in the study of this alternation, and the limited time assigned for the interviews, it was not possible to include style as an internal variable.

8.4 Results

In this section, overall distributional results will be presented. This will be followed by mixed-effects as well as fixed-effects results of (ɣ). The results show that the [ɣ] variant is frequently used in al-ʿAḥsāʾ Arabic. Mixed-effects findings show that the (ɣ) variable is mainly stratified by gender and is not significantly influenced by socio-sectarian affiliation or age. Fixed-effects

analysis (without individual speakers as a random effect factor) was performed in order to determine whether or not any suggestive links exist with socio-sectarian affiliation or age. The results showed significant correlations with socio-sectarian affiliation, gender and age.

The total number of tokens elicited from both categorical and non-categorical speakers is 2639. After the removal of categorical speakers, the total number of remaining tokens is 1958. Overall distributional, mixed-effects as well as fixed-effects results will be given next.

8.4.1 Overall distribution of (ɣ)

Figure 15 clearly shows a diverse behaviour in the use of (ɣ) among both categorical and non-categorical speakers of al-ʿAḥsāʿ; with more than quarters three of the tokens realised as [ɣ] (77.7%); and with less than a quarter of the tokens realised as [q] (22.3%).

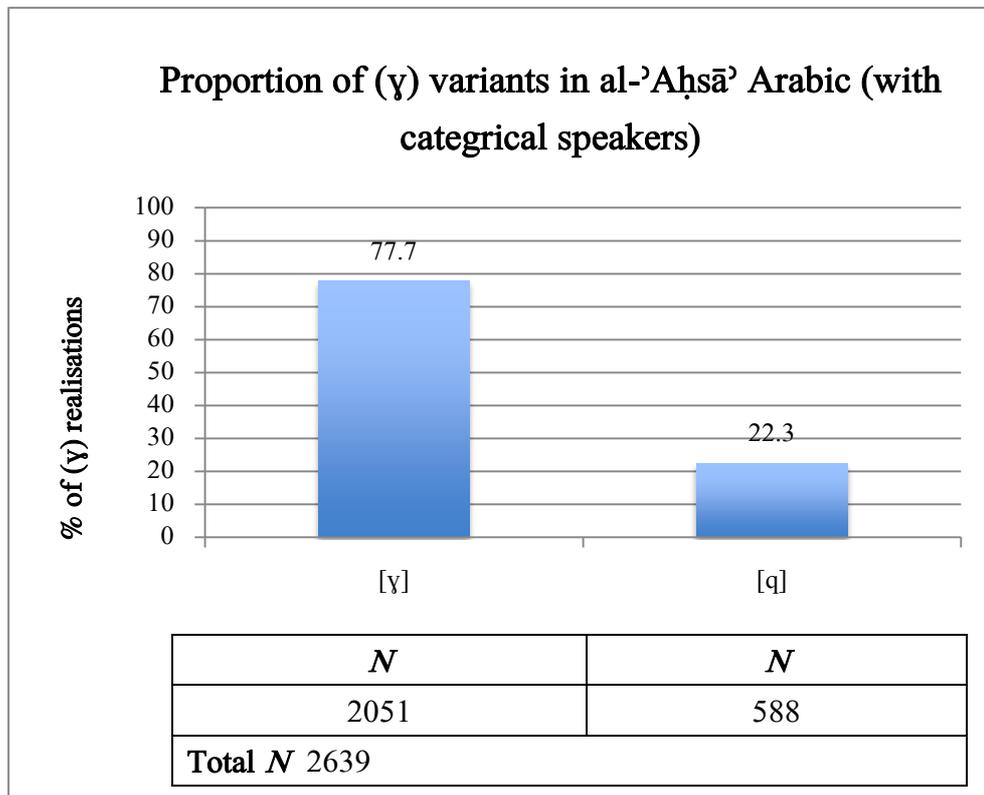


Figure 15 Overall distribution of (y) in al-ʿAḥsāʾ Arabic (with categorical speakers)

Figure 16 illustrates the distribution of (y) variants as produced by non-categorical speakers. The findings show that the removal of categorical speakers has caused the rates of (y) variants to become closer, i.e. 70.72% for [y] and 29.97% for [q], than when categorical speakers were included, i.e. 77.7% for [y] and 22.3% for [q]. Overall, the data show that [y] is the dominant realisation in the dialect of al-ʿAḥsāʾ Arabic.

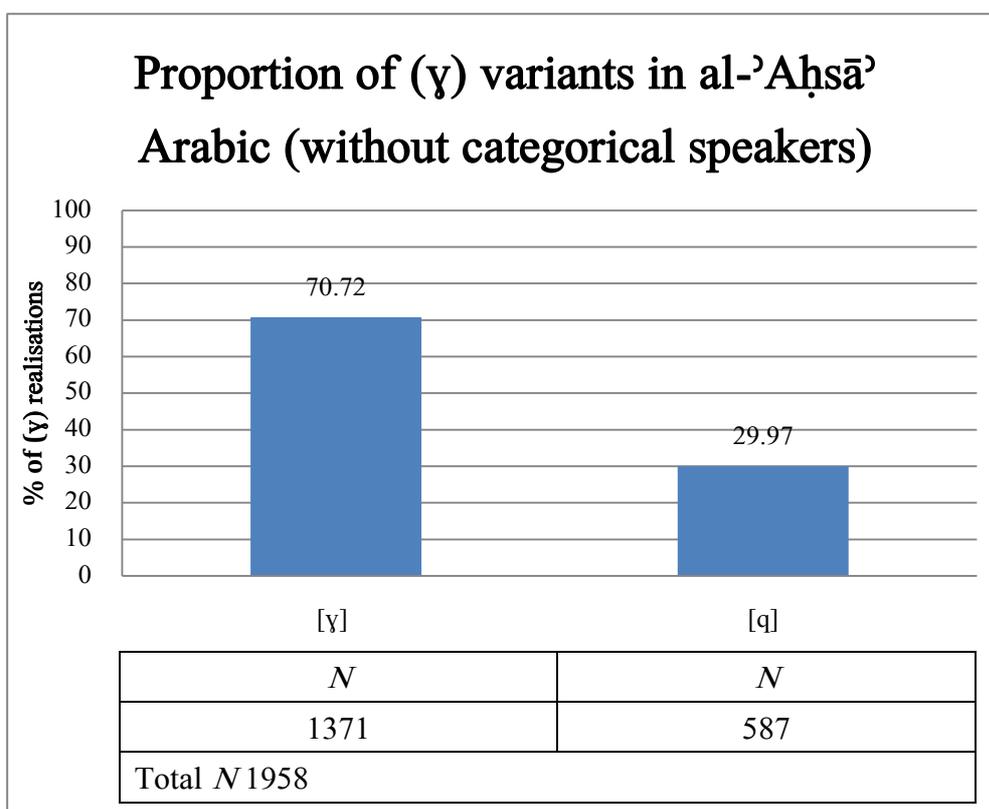


Figure 16 Overall distribution of (y) in al-ʿAḥsāʾ Arabic (without categorical speakers)

8.4.2 Mixed-effects analysis of (y)

Mixed-effects results of social factors affecting the use of (y) are shown in Table 18; with [y] as the application value. The results indicate a clear gender ($p = 0.000525$) influence in the distribution of [y], with males (0.632 log odds) surpassing females (-0.632 log odds) to a pronounced degree in the use of [y]. The findings here echo those obtained by Taqi (2010), who found that both Najdī and ʿAjmī females exhibit a much higher usage of the [q] variant than their male counterparts.

Many sociolinguistic studies have shown that females are more innovative than males, as well as being more attached to standardness and

prestige (cf. J. Holmes, 1997; Labov, 1966b; Trudgill, 1985; W. Wolfram, 1969; W. Wolfram & Fasold, 1974). When similar studies were first conducted in the Arabic speaking world, contrary findings were reached, with males showing a greater preference for Modern Standard Arabic than females (cf. Abdel-Jawad, 1981; Bakir, 1986; R. W. Schmidt, 1986). Ibrahim (1986, p. 115) explains this by saying that as Arabic is a diglossic language (cf. Ferguson, 1959a), it should not be treated in the same way as non-diglossic languages. Ibrahim (1986, p. 115) further argues that standard and prestige may coincide in other languages and therefore be used as interchangeable terms, whereas in Arabic standard and prestige may be quite different things. Many Arabic studies have shown that females may approximate a wide range of different prestigious varieties in different contexts. These include an urban variety (Abdel-Jawad, 1981; Haeri, 1994), a foreign language (Abu Haidar, 1991), a non-tribal variety (al-Ahdal, 1989), or even Modern Standard Arabic (Abu Haidar, 1989).

In the dialect of al-ʿAḥsāʾ, some locally marked variants, e.g. [š], [č], and [j], have been largely abandoned by females. These forms have been replaced by supra-local prestigious forms, i.e. [k] and [g] (see section 6.4). With the (k) variable, prestigious supra-local [k] corresponds to the Modern Standard Arabic realisation. However, with the (g) variable, supra-local [g] is a colloquial variant that does not match Modern Standard Arabic [q]. This demonstrates that females are shifting to prestigious supra-local forms, regardless of whether or not they are standard. The situation with the (y) variable is slightly different from (k) and (g). The findings with regards to (y)

show males to be surpassing females in the use of the [ɣ] variant. Although [ɣ] matches the supra local form, it is mainly considered as standard, rather than as prestigious. Quotes 27, 28, and 29 in Appendix B clearly demonstrate that speakers relate the use of (ɣ) to Modern Standard Arabic. They consider the use of [ɣ] as an indicator of language proficiency. In contrast, they regard the use of [q] a mistake and a sign of linguistic weakness.

In sociolinguistic studies, it is relatively common to have gender correlations that vary from one variable to the other (Eckert, 1989b, p. 248). A possible explanation for the case at hand could relate to the degree of saliency of the variables involved. According to Trudgill (1986, p. 11), linguistic features become more salient when they are involved in linguistic change or if they have variants that are “phonetically radically distinct” (Trudgill, 1988, pp. 128–137) (see section 4.3.4). In relation to the present study, the age patterns associated with (k) and (g) (see section 6.4) are more likely than (ɣ) to be involved in linguistic change (as will be seen below). In addition, [ɣ] and [q] mainly differ in terms of manner of articulation, and are thus less phonetically distinct than the pairs [k] and [č], as well as [g] and [j], which are distinct not only in terms of manner but also place of articulation.

Although the (ɣ) variable is under overt corrective pressures that grant it some degree of saliency, many speakers have expressed their lack of knowledge regarding when to use [ɣ] and when to use [q] (see quotes 29 and 30 in Appendix B). This is not the case with (k) and (g), with no participant confessing an inability to effectively use the supra-local variant. In other

words, speakers know that [k] and [g] are more prestigious than [č] and [j] respectively, but they are not confused about which one to use. Further discussion of this is provided under the fixed effects findings in this section.

One might think that education would have an influence on the use of (ɣ). However, previous configurations of the mixed-effects model have generally shown that education has an insignificant impact on the use of (ɣ) among elderly speakers. One of the participants was a middle-aged Shiite female Arabic teacher, who extensively used the [q] variant. Similarly, a middle-aged female Sunni school principal also showed a high use of [q]. This illustrates that education does not necessarily influence standardisation, as some teachers use the [q] variant of [ɣ].

Position in the word was not found to have a significant influence on the use of (ɣ) in al-ʿAḥsāʾ Arabic, confirming previous descriptions provided by Holes (1987) and al-Qouzi (2009) in Bahrain, as well as Taqi (2010) in Kuwait.

Table 18 Mixed-effects results of (y)

Total N 1958		Deviance 1960.103		df 3	Grand mean 0.7
Individual speaker standard deviation 1.239					
Factor group	Factors	Log odds	N	Proportion of application value	Centred factor weight
Gender	Male	0.632	1192	0.791	0.653
	Female	-0.632	766	0.559	0.347
p =					
0.000525					
Not selected as significant: socio-sectarian affiliation, age, and position					

Socio-sectarian affiliation and age were not selected as being significant in the mixed-effects analysis. Nonetheless, subsequent fixed-effects analysis without individual speakers as a random effect (replicating VARBRUL analysis) has shown them to be significant (see Table 19). This means that a great deal of speaker variability exists within these factors. Only by obtaining more data, would it be possible to conclusively decide whether or not socio-sectarian affiliation and age truly have an influence on the use of (y).

In the fixed-effects analysis, old and middle-aged Sunni males were shown to typically use [y], whereas adolescent and young Shiite females commonly use [q]. Looking at this in more detail, and in agreement with the mixed-effects findings, gender is the most significant factor, followed by age. Unlike what might be expected, [y] is more common among elderly (0.217 log odds) and middle-aged (0.160 log odds) speakers than adolescent and

young speakers (-0.376 log odds). It could be the case that, although younger speakers are more engaged in education, they have not yet successfully acquired certain Modern Standard Arabic realisations. This may even be attributable to their teachers not pronouncing these sounds correctly. Informal observations suggest that many speakers do not know whether certain words should be pronounced with [ɣ] or [q] (see quotes 3 and 4 in Appendix B). This is often reflected in writing with both Modern Standard Arabic and the local dialect, i.e. words that should be written with < غ > standing for [ɣ] are often misspelled and written with < ق > standing for [q]. Examining a number of papers written by anonymous students majoring in Arabic linguistics at King Faisal University in al-ʿAḥsāʾ easily yielded several examples of this, e.g. *ʿaqḻab* ‘moste’ instead of *ʿayḻab*, and *qurfā* ‘room’ instead of *ɣurfā*. It should be mentioned that this was not observed with (k) and (g), i.e. speakers know that [č] and [j] should be avoided when writing words that have /k/ and /q/.

In relation to socio-sectarian affiliation, Sunnis (0.145 log odds) surpass Shiites (-0.145 log odds) in the use of [ɣ]. The results here are unlike those obtained in Bahrain, in which the Sunnis were shown to typically use [q], whereas Shiites use [ɣ] (Holes, 1987). This finding might be related to the fact that Sunnis of al-ʿAḥsāʾ tend to follow the dialectal features diffusing from the capital city, Riyadh. Because of this, the [ɣ] variant is not only a standard variant but also a high-status variant associated with the supra-local dialect. To Bahrainis, [q] is a high-status variant used in the capital city by prestigious Sunnis. The shift of Bahraini Sunnis to [ɣ] is mainly driven not by

high-status but by standardness. Meanwhile, the Shiites of Bahrain differ from those of al-^ʿAḥsā^ʿ. Bahraini Shiites almost categorically use [ɣ], while al-^ʿAḥsā^ʿ Shiites alternate between the use of [ɣ] and [q]. It is possible that Sunnis and Shiites of Bahrain had a stable variation overlap, with a shift by Sunnis to standard [ɣ]. In al-^ʿAḥsā^ʿ, this kind of sharp divide does not seem to exist between Sunnis and Shiites. Both groups exhibit a use of [q], although Shiites seem to be more likely to retain it. As with other variables in this study, Shiites show a stronger tendency towards maintaining local variants.

Again, as in mixed-effects analysis, position was not found to have a significant influence on the use of the (ɣ) variable.

Table 19 Fixed-effects results of (ɣ)

Total N 1958		Deviance 2230.746		df 5	Grand mean 0.7	
Factor group	Factors	Log odds	N	Proportion of application value	Centred factor weight	
Gender p = 1.16e-25	Male	0.536	1192	0.791	0.631	
	Female	-0.536	766	0.559	0.369	
Age p = 7.93e-07	Elderly	0.217	844	0.759	0.554	
	Middle-aged	0.160	449	0.724	0.54	
	Adolescent & young	-0.376	665	0.609	0.407	
Socio-sectarian affiliation p = 0.00944	Sunni	0.145	696	0.759	0.536	
	Shiite	-0.145	1262	0.668	0.464	
Not selected as significant: position						

8.5 Conclusion

The mixed-effects results of the (ɣ) variable among speakers of al-ʿAḥsāʾ show that the use of (ɣ) is only constrained by gender. Specifically, males seem more attached to the standard [ɣ] variant, whereas females are more likely to use the variant [q]. The high use of [ɣ] among males suggests that standardness might have a stronger influence than prestige on the use of the [ɣ] variant. The (ɣ) variable is most likely to be engaged in a stable linguistic variation, especially as no significant age stratifications were found.

Evidence suggestive of significant socio-sectarian and age differences was found through fixed-effects analysis. Nonetheless, in order to rule out the possibility of significance overestimation, further data need to be collected from larger numbers of participants in future studies.

Chapter 9 The (-i) variable

9.1 Introduction

This chapter examines variation in the use of the 1st person singular possessive pronoun (-i) and the 1st person singular object pronoun (-ni) in al-^ʿAḥsāʿ Arabic, as well as its association with social factors. In al-^ʿAḥsāʿ Arabic, (-i) may be realised as [-i/-y], or [-ya]; whereas (-ni) may be realised as [-ni], or [(a)-nya]. In the present investigation of this topic, the (-i) and (-ni) variables are conflated into one and their variants are conflated into two groups based on the presence or absence of [-ya], i.e. [-i] or [-ya]. For the logic behind such confluations see section 9.3.1. Herein, the [-i], [-y], and [-ni] variants will be collectively referred to as [-i]; whereas the [-ya], [-anya], and [-nya] variants will be collectively referred to as [-ya]. In the present study, the (-i) variable is studied in relation to socio-sectarian affiliation (Sunnis vs. Shiites), gender (male vs. female), and age/education (adolescent, young and middle-aged as one group, in comparison with both educated elderly and non-educated elderly).

In al-^ʿAḥsāʿ, the unconditioned use of the [-ya] variant, used as a 1st person singular possessive and object pronoun both post-consonantly and post-vocalically, is stereotypically associated with Shiites' speech (for information on the difference between conditioned and unconditioned uses of -yV see section 9.2.1). The findings of the present study indicate that almost all Sunnis categorically use the [-i] variant. In non-categorical Shiites' speech, both [-i] and [-ya] are generally evenly used. They are stratified in terms of

age and educational level. Adolescent, young and middle-aged Shiite speakers increasingly shift towards the standard, prestigious and supra-local variant [-i]; whereas elderly speakers maintain the local variant [-ya]. Among elderly speakers, the use of standard [-i] is promoted among those who are educated, while non-educated speakers tend to preserve the usage of the local [-ya]. The current findings are suggestive of variation patterns that are typical of regional-dialect levelling processes, wherein localised linguistic features found in rural and urban varieties are replaced by linguistic features used over a wider region. Such linguistic changes are hypothesised to be stimulated by major socioeconomic changes that took place in Saudi Arabia during the last couple of decades.

The present chapter starts with a diachronic and synchronic overview of the conditioned and unconditioned uses of [-ya], and the way they are manifested in Afro-Asiatic and Semitic languages, with a focus on their utilisation in Arabic (section 9.2.1). The linguistic contexts in which conditioned *-ya* is used will then be described in light of the previous descriptions of al-ʿAḥsāʾ dialect and other regional dialects (section 9.2.2). After this, the geographical distribution of conditioned and unconditioned *-yV* in the Arabian Peninsula will be provided (section 9.2.3). Previously identified links between (-i) and social factors will then be described (section 9.2.4). An identification of the envelope of variation (Labov, 1972a) will be conducted in section 9.3.1. This entails fine-tuning the grammatical systems in which alternations are possible and specifying the types of speakers who produce them. The coding schema for the dependent and

independent factors will be specified in section 9.3.2. The overall distribution of [-i] and [-ya] in al-ʿAḥsāʿ Arabic, as well as the results of both mixed and fixed-effects, will be given in section 9.4.

9.2 Review of previous studies

The conditioned and unconditioned uses of *-yV* as a 1st person singular possessive and/or object pronoun are apparent in many Afro-Asiatic and Semitic languages. Below is a review of the use of *-yV* in these languages from both a synchronic and diachronic perspective. A description of the linguistic system in which *-i* is used will be performed in light of previous accounts of al-ʿAḥsāʿ and Qatar dialects. Previously found associations between (-i) and social factors in al-ʿAḥsāʿ and Qatar will then be discussed in light of these accounts.

9.2.1 The use of *-yV* in Arabic and Afro-Asiatic languages

In Afro-Asiatic languages, the use of *-yV* may be conditioned or unconditioned. It is conditioned when used as a possessive suffix (mainly post-vocally in Arabic varieties), and unconditioned when used as a possessive/object suffix (both post-vocally and post-consonantly in some Arabic varieties). In this section, both the conditioned and unconditioned uses of *-yV* in Arabic and other Afro-Asiatic languages will be reported.

In Old Semitic languages such as Akkadian, Amorite, Eblaite, Northern Phoenician, and Classical Arabic, the use of *-yV* is conditioned. In Classical Arabic, *-yV* is also occasionally unconditioned. The different

realisations of the 1st person singular possessive and object pronouns in each language are relatively similar. In Akkadian, the nominal realisations are *-ma*, *-ya*, and *-ī*, whereas the verbal realisation is *-ni* (Buccellati, 1997, p. 84). In Amorite and Eblaite, the nominal realisations are post-consonantal *-ī*, and post-vocalic *-a/(y)a*; while the verbal realisation is *-ni* (C. H. Gordon, 1997, p. 107). Northern Phoenician has *-ī* as the possessive nominative realisation and *-i(y)a* as the possessive genitive realisation, the verbal suffix being *-nī* (Segert, 1997, p. 177).

In Classical Arabic, the 1st person possessive suffix is attached to nouns and can be realised as *-ī/-y/-ya*. In post-vocalic situations, if the preceding vowel is short, *-ī* is used and the preceding vowel is dropped in both pausal and non-pausal positions. For instance, non-pausal *kitābu*, *kitābi*, and *kitāba* ‘book’, with final vowels representing the nominative, genitive and accusative cases respectively, as well as pausal *kitāb* will all become *kitāb-ī* ‘my book’. When the 1st person possessive suffix is attached to a stem-final long vowel occurring in utterance-final position, *-y* is used, e.g. *mu‘allimū-y* ‘my teachers’, *kitābā-y* ‘my two books’. When the possessive suffix occurs in the middle of the utterance, *-ya* is used, e.g. *‘aṣā-ya* ‘my stick’, *dunyā-ya* ‘my life’. With some prepositions such as *‘alā* ‘on’, and *fī* ‘in’, the stem-final long vowel is shortened and /y/ is geminated giving *‘ala-yya* ‘on me’, *fī-yya* (pausal *‘ala-yy* and *fī-yy*). In Classical Arabic, the 1st person object suffix is *-ni*, e.g. *ra‘ayta-ni* ‘you saw me’ (cf. Fischer, 1997, pp. 202–203). This does not vary according to properties of the stem to which it attaches, e.g. *sā‘id-nī* ‘help me’, *sā‘ada-nī* ‘he helped me’, *‘a‘ṭā-nī* ‘he gave me’.

Exceptions to the above rules take place in Classical Arabic when either of the 1st person singular possessive or object pronouns is followed by a word whose underlying initial elidable *hamzah* (glottal stop) is deleted. Elidable *hamzah* is always followed by a short vowel /i/, /u/, or /a/. Elidable *hamzah* and the following vowel are both retained only in utterance-initial position. When preceded by a vowel, elidable *hamzah* and its following short vowel or liaison are deleted, e.g. *hiya + 'allatī* → *hiya-llatī* ‘she is the one who’. Similarly, when preceded by a consonant, elidable *hamzah* and its following short vowel are also deleted, however a helping vowel, usually /i/, is inserted, e.g. *'if'al + 'al'amr* → *'if'al -i- l'amr* ‘do the thing’ (cf. Ryding, 2005, pp. 19–20). When elidable *hamzah* is preceded by the possessive or object pronoun *-(n)ī*, two processes take place. First, elidable *hamzah* and its following vowel are deleted as usual. Second, the /ī/ of the pronoun becomes /iy/ and the helping vowel inserted between this and the following word is /a/, *ṣadīq + -ī + 'inṣarafā* → *ṣadīq-iy-a-nṣarafā* ‘my friend went away’.

The aforementioned descriptions of *-ya* as found in the 1st person singular possessive and object suffixes in Classical Arabic (and Modern Standard) are general. There is another specific occasional realisation, found only in Classical Arabic, *-iyah*, which does not conform to the above descriptions. The occasional reflex *-iyah* is sometimes falsely considered as one of the realisations of *hā'* *as-sakt* (lit. ‘the <h> of silence’) in Classical Arabic. *Hā'* *as-sakt* is called the ‘<h> of silence’ because it mostly occurs in utterance-final position and is therefore not followed by a vowel. As will be seen below, examples found in the Quran and *Kitāb Sibawayh*, show that *hā'*

as-sakt is a general phenomenon that is occasionally found following short vowels which would otherwise normally be word-final. In Arabic, short final vowels occurring in utterance-final position are deleted. Occasionally, /h/ is attached to these vowels, which presumably serves as a mechanism to prevent their deletion. Because of this, the reflex *-iyah* is not, as a whole, a realisation of *hā'* *as-sakt*. Rather it is simply that *-iya* ends in a short vowel and thus, when it occurs in utterance-final position, takes an additional *hā'* *as-sakt*. To illustrate this, examples of *hā'* *as-sakt* as found in the Quran and *Kitāb Sībawayh* will be given next. Each will include a few examples of the possessive and object suffix *-iyah*.

In the Quran, *hā'* *as-sakt* can be attached to verbs in the imperative mood, e.g. *iqṭadih* 'be guided' (Quran, chapter 6, verse 90). It can also be attached to the 3rd person singular feminine independent pronoun after the negation particle *mā*, e.g. *mā hiyah* 'what it is' (Quran, chapter 101, verse 10). The 1st person singular possessive pronoun *-iya* (with additional *hā'* *as-sakt*) is suffixed to the following nouns in the Quran, *kitāb-iyah* 'my record' (Quran, chapter 69, verse 19), *ḥisāb-iyah* 'my account' (Quran, chapter 69, verses 20 and 26), *sulṭān-iyah* 'my authority' (Quran, chapter 69, verse 29), and *māl-iyah* 'my wealth' (Quran, chapter 69, volume, 28). All of these nouns occur in pausal positions in the Quran and none of them is followed by elidable *hamzah* in the next verse.

Sībawayh (*Kitāb*, Vol. 4) gives several examples of *hā'* *as-sakt* in Classical Arabic. For instance, *hā'* *as-sakt* is inserted with imperative verbs

whose stem consists of only one consonant that cannot stand alone, e.g. *ʿi* → *ʿih* ‘understand!’ and *šī* → *ših* ‘dress!’ (Kitāb, Vol. 4, p. 144). In the imperative and jussive moods of verbs which contain a final vowel, *hāʾ as-sakt* can also be added, e.g. *irmi* → *irmih* ‘throw’, *lam yarda* → *lam yardah* ‘he did not accept’ (Kitāb, Vol. 4, p. 155), including in cases where verbs drop an initial weak root consonant in the imperfect, *taqi* → *taqih* ‘you avoid’ (*w-q-y*), *ʾaʿi* → *ʾaʿih* (*w-ʿ-y*) ‘I understand’ (Kitāb, Vol. 4, p. 159). In addition to verbs, the examples given by Sībawayh demonstrate that *hāʾ as-sakt* can be attached to question words, demonstratives, particles, adverbs, and suffixed and independent pronouns. An example of a question word is *kayfā* ~ *kayfah* ‘how’. *Hāʾ as-sakt* can be placed after the vowels /a/ and /ā/ in demonstratives, e.g. *haʾulāʾ* ~ *haʾulāh* ‘these’, adverbs, e.g., *hahuna* ~ *hahunah* ‘here’ (Kitāb, Vol. 4, p. 165) and particles, e.g. *layta* ~ *laytah* ‘I wish’, *laʾalla* ~ *laʾallah* ‘maybe’ (Kitāb, Vol. 4, p. 162). In terms of pronouns, *hāʾ as-sakt* can be attached to the suffixed 2nd person singular masculine pronoun *-ka*, e.g. *bi-ḥukmi-kaḥ* ‘with your judgement’ (Kitāb, Vol. 4, p. 163), and to some independent pronouns, e.g. *hiya* ~ *hiyah* ‘she’ and *huwa* ~ *huwah* ‘he’ (Kitāb, Vol. 4, p. 163).

Sībawayh gave examples in which *hāʾ as-sakt* is added after the *-iya* realisation of the 1st person singular possessive pronoun *-ī* as attached to nouns, e.g. *ʾulām-ī* ~ *ʾulām-iyah* ‘my boy’, and prepositions, e.g. *baʿd-ī* ~ *baʿd-iyah* ‘after me’ (Kitāb, Vol. 4, p. 163). This also occurs after /ā/ or /y/, e.g. *ʾulāmā-ya* ~ *ʾulāmā-yah* ‘my two boys (nom.)’ ~ *ʾulāmay-yah* ‘my two boys (acc./obl.)’, *ʾašā-ya* ~ *ʾašā-yah* ‘my stick’, *bušrā-ya* ~ *bušrā-yah* ‘good

news' (Kitāb, Vol. 4, p. 163). In addition, Sībawayh gave examples in which *hā'* *as-sakt* is attached to the *-niyah* realisation of the 1st person singular object pronoun *-ni* which is attached to verbs, *ḍaraba-ni* ~ *ḍaraba-niyah* 'he hit me' (Kitāb, Vol. 4, p. 163).

Many contemporary Semitic languages and varieties have similar realisations of the 1st person singular possessive pronoun, as well as the 1st person singular object pronoun. In many of these varieties, *-ya* is a conditioned possessive suffix. The unconditioned possessive and object suffix *-ya* seems to be only attested in al-ʿAḥsāʿ Arabic. The reflex *-yV* has also been cited as a reflex of the possessive and object suffixes in the Modern South Arabian language Ḥarsūsi (cf. Simeone-Senelle, 1997, pp. 388–389). In Ḥarsūsi, the 1st person singular possessive pronoun suffix is *-yε* (plural nouns) and the object suffix is *-əni(yə)* (verbs and prepositions). This is with the consideration that the possessive and object suffixes *-i* (singular nouns) (Simeone-Senelle, 1997, p. 388) and *-ni* respectively have also been reported in Ḥarsūsi (cf. Johnstone, 1977, pp. 100–146). The suffix *-ya* is also attested in the Mahriyōt dialect of Ḥawf in Yemen, where it functions as a possessive pronoun attached to plural nouns and as a pronoun annexed to certain prepositions (Watson, 2012, pp. 67-76). In Mahriyōt, *-ya* also variates with *-ī* when the suffix acts as a possessive pronoun attached to singular nouns and some trilateral prepositions, as an object pronoun suffixed to all other verb forms, and as a pronoun annexed to the adverbial particles *ʿād* 'still' and *bār* 'already' (Watson, 2012, pp. 67-76). However, the *-ya* form does not occur in the Mahriyōt dialect when the dependent pronoun functions as an object pronoun

to perfect verbs in the second person masculine, singular/third person feminine plural, or when it is suffixed to most monoliteral, bilateral and trilateral prepositions (Watson, 2012, pp. 67-76). Below are descriptions of the different realisations of the 1st person singular possessive pronoun in non-Arabic varieties, followed by the pronoun in Arabic varieties.

The following non-Arabic varieties have, *-yV* as a conditioned allomorph of the possessive suffix only. In the Ethiopian Semitic language Argobba, the 1st person singular possessive pronoun is realised as *-ya/-e*, e.g. *bed-ya/bed-e* ‘my house’ (G. Hudson, 1997, p. 462). In Maltese, the possessive pronoun is realised as *-i/ya* (Kaye & Rosenhouse, 1997, p. 288). The use of *-yV* as a 1st person singular possessive pronoun suffix is common in many (non-Arabic) South Arabian languages. In the Hobyōt from Ḥawf, the realisation is *-i* (singular nouns), *-iyə* (plural nouns), or *-ī* (verbs and prepositions) (Simeone-Senelle, 1997, p. 388). The form *-ya* is also used in the Omani Mehreyyet dialect as a possessive pronoun to plural nouns, as well as a pronoun suffix to certain prepositions (Watson, 2012, pp. 67-76).

In many Arabic varieties, the 1st person singular possessive pronoun is realised as *-i/-y*; whereas the 1st person singular object pronoun is realised as *-ni*. In some Arabic varieties, the allomorph *-ya* is also used. Varieties that exhibit the *-ya* allomorph may be divided into two, namely those in which *-ya* is only used as a possessive pronoun that is conditioned to vowel-final stems which become subject to lengthening, as well as those in which *-ya* is used as

both a possessive and object pronoun that can be unconditionally attached to both vowel and consonant final stems.

There are many Arabic varieties in which the conditioned post-vocalic use of the 1st person singular possessive suffix allomorph *-yV* is found. In Cairene Arabic the possessive suffix is *-i* post-consonantly and *-ya* post-vocalically e.g. *umm-i* ‘my mother; *kutub-i* ‘my books’, *abū-ya* ‘my father’, *fī-ya* ‘in me’, *ḥamā-ya* ‘my father-in-law’. In Ṣan‘āni Arabic, *-ī* is used post-consonantly and post-vocalically except when the final vowel of the stem is /ā/ then *-ya* is used, e.g. *ibn-ī* ‘my son’, *gaḥā-ya* ‘behind me’ (Watson, 2007, p. 190). In Moroccan Arabic, the possessive pronoun is realised as *-i/ya*; in Damascene and Baghdadi Arabic, it is *-i/-yi* (Kaye & Rosenhouse, 1997, p. 288). Holes (1990) states that in Gulf Arabic, the 1st person singular possessive pronoun is realised as *-i*, e.g. *bēt-i* ‘my house’ (p. 171); whereas the 1st person singular object pronoun is *-ni*, e.g. *šawwaf-ni* ‘he showed me’ (p. 185). Holes (1990, p. 235) restricts *-yV*, realised as *-ya* or *-yi*, to the prepositions *fī* ‘in’, *bi* ‘with’, *ila* ‘to’, and *‘ala* ‘on or about’, e.g. *fī-yyia* ‘in me’, *‘alē-yi/a* ‘on me’. From the examples he has given, it appears that *-yV* is conditioned and restricted to stem-final vowels of some prepositions. It also seems that /y/ is sometimes geminated. Holes adds that in subvarieties of Gulf Arabic, *-ni*, which is normally attached to verbs, can sometimes be attached to the particle *fī* ‘in’ giving *fī-ni* ‘in me’. In relation to Saudi Arabian dialects, some generalisations can be drawn from the examples cited by Prochazka (1988). In many Saudi dialects, *-i/-y/-ya/-yi* are found as reflexes of the possessive suffix. The post-vocalic conditioned *-ya* allomorph is found in Bal-

Qarn, e.g. *bū-ya* ‘my father’ (p. 207), Rwayli e.g. *ʿubū-ya* ‘my father’ (p. 208), al-Qahabah, and Tanūmah, e.g. *ʿabū-ya* ‘my father’ (p. 207). The *-yi* allomorph is attached to words ending with /y/ in dialects such as al-Qaṣīm, e.g. *kirsiy-yi* ‘my chair’ (p. 204), al-Quaz, e.g. *ṭaliy-yi* ‘my kid’ (p. 203), Ḥāyil, e.g. *yiday-yi* ‘my hands’ (p. 206), Najrān, e.g. *ʿāday-yi* ‘my hands’ (p. 206). With prepositions, the /y/ in *-yV* is geminated in some dialects, such as Rufaidah, Abhā, al-Quaz, Ṣabyā, and Rwayli, e.g. *ʿala-yya* (pp. 220-221), Ghāmid, e.g. *ʿāla-yya*, and Abhā, e.g. *fī-yya* (p. 221). It must be said that further research should be conducted on speakers of the above dialects in order to determine whether or not they, or some of them, categorically use *-yV*, or only use it interchangeably with *-i/-y*.

In many of the aforementioned dialects, the 1st person singular object suffix is *-ni*. However, some dialects exhibit other forms. For instance, from the examples cited by Prochazka (1988) it appears that *-an* is used post-consonantly, whereas *-nan* is used post-vocally in Ḥāyil, e.g. *ḍrub-an* ‘he hit me’ (p. 134), and *ḍrubō-nan* ‘they hit me’ (Prochazka, 1988, p. 134). In al-Qaṣīm, *-an* is used post-consonantly; whereas *-n* is used post-vocally, e.g. *msik-an* ‘he caught me’ (p. 134), and *ḍrubō-n* ‘they hit me’ (p. 138). In Balqarn, *-anni* is used post-consonantly, whereas *-ni* is used post-vocally e.g. *simi^ʿ-anni* ‘she heard me’ (p. 140), e.g. *simi^ʿō-ni* ‘they heard me’ (p. 141).

The Saudi dialect of al-ʿAḥsāʿ is interesting because it seems to be one of the very few modern Arabic dialects that exhibits the unconditioned use of

-ya as both a possessive and object suffix attached both post-vocally and post-consonantly. In al-ʿAḥsāʿ Arabic, *-i/-y/-yi* or *-ya* are all allomorphs of the possessive pronoun, while *-ni* or *-anye/-nye/-ye* are allomorphs of the object pronoun. The reflexes *-i/-y/-yi* are interchangeable with *-ya*. Similarly, *-ni* is interchangeable with *-anye/-nye/-ye*. The linguistic constraints of each allomorph will be described more in detail in section 9.2.2.

There is a relative paucity of information available about other dialects that may exhibit unconditioned use of *-yV*. A brief description of Qatari Arabic by Maṭar (1976, pp. 13–14) shows that *-i/-y* or *-yah* are allomorphs of the possessive suffix. From the examples he (1976, pp. 13–14) cites, *-yah* appears to be used as a suffix both post-vocally and post-consonantly e.g. *bēt-i ~ bēt-yah* ‘my house’, *taḥt-i ~ taḥat-yah* ‘under me’. Unfortunately, Maṭar (1976) did not cite examples of the 1st person singular object pronoun.

There are conflicting views regarding the reconstruction of the 1st person singular possessive and object suffixes in Proto-Semitic. On the one hand, Hetzron (1990a, p. 587) states that Proto-Semitic has *-i* as the 1st person singular possessive pronoun attached to nouns and prepositions and *-ni* as an object pronoun attached to verbs. He posits that the original distribution of *-i* and *-ni* may have been based on phonetic conditioning rather than function in Proto-Semitic. The allomorph *-i* might have been used when not preceded by a suffix and *-ni* may have been utilised after a suffix. On the other hand, Bergsträsser (1977, 1983, p. 7 as cited in Weninger, 2011, p. 168)

reconstructs the 1st person singular possessive pronoun attached to nouns in Proto-Semitic as *-ya/-ī*, and the 1st person singular object pronoun attached to verbs as *-nī*. Information obtained from the aforementioned descriptions of many synchronic as well as diachronic Afro-Asiatic languages seems to lend support to the latter premise. In other words, it seems that conditioned use of possessive *-yV* is likely to be an ancient Semitic feature that is prevalent in many modern Semitic languages and varieties. This poses the question of where the unconditioned use of *-yV* in al-ʿAḥsāʾ Arabic originated. Based on the examples provided by Sibawayh, this feature seems to be traceable to an Ancient Arabic variety, occasional samples of which are found in Classical Arabic. It might have occurred as a result of an analogical extension from the conditioned use of *-yV*. Alternatively, it may be a borrowing from an ancient language closely related to Ḥarsūsi, which as noted above, seems to be the only other Semitic language that has this property. Speakers in these remote pockets might have carried this feature with them, along with other features such as the *-(a~i)š* reflex (see section 7.2.3 for more details), during their migration east from Yemen, long before the Ḥarasis migrated to Oman in the early 19th century.

9.2.2 The linguistic constraint on the use of *-ya*

No extensive literature has been written about the synchronic linguistic aspects of conditioned *-yV* in Gulf dialects that exhibit this feature. What is available are short notes on *-yV* and lists of examples found in al-Hufūf dialect (Prochazka, 1988). Some brief remarks also exist on this phenomenon in Qatar (Maṭar, 1976).

Prochazka (1988) studied the morphology of some Saudi dialects, examining the southern Ḥijāz and Tihāmah, as well as the Najdī and Eastern Arabian dialects. His focus was on inflections of verbs and suffixation of verbs, nouns, prepositions and particles. One of the dialects he investigated was the dialect of al-Hufūf, which is one of the two main urban centres of al-ʿAḥsāʾ. Among the morphological aspects he examined were the 1st person singular possessive suffix and the 1st person singular object suffix. Prochazka (1988) states that the 1st person singular possessive pronoun may be attached to nouns, prepositions and particles and is realised as *-i/-yeh* post-consonantly, e.g. *bgir-i ~ bugar-yeh* ‘my cattle’ (p. 194), and *-y/-yeh* post-vocally, e.g. *uxū-y ~ uxū-yeh* ‘my brother’ (p. 208). On the other hand, he (1988) says that the 1st person singular object suffix is added to verbs and is realised as *-ni/-anyeh/-yeh* post-consonantly, e.g. *ḍarab-ni ~ ḍrub-anyeh* ‘he hit me’ (p. 134), and *sāmʿat-ni ~ sāmʿat-yeh* ‘she has heard me’ (p. 137), and *-ni/-nyeh* post-vocally, e.g. *kallimō-ni ~ kallimo-nyeh* ‘they spoke to me’ (p. 150). According to Prochazka (1988, pp. 128–137), the reflex *-yeh* is only attached to perfect verbs ending with the 3rd person singular feminine *-at* pronoun, e.g. *msikat-ni ~ msikat-yeh* ‘she caught me’. Generally, Prochazka’s (1988) description of the 1st person singular possessive and object suffixes broadly corroborates the findings of the present study (for more elaborate details on the linguistic aspects of *-i* in al-ʿAḥsāʾ dialect see section 9.3.1).

As mentioned in the previous section, Maṭar (1976, pp. 11–21) discussed *-ya* as a rare phenomenon in Gulf dialects, as represented by Qatari Arabic. He (1976, p. 14) found *-ya* to be attached to nouns ending with

consonants, e.g. *sayyārat-ya* 'my car', *kitāb-ya* 'my book', and to prepositions ending with either consonants or vowels, e.g. *taḥat-ya* 'under me', *li-ya* 'mine'. Despite studying the language in detail, Maṭar (1976) did not make any remarks about the verbal suffix.

9.2.3 Geographical distribution of *-yV* in the Arabian Peninsula

Dialects using *-yV* as a suffix pronoun in the Arabian Peninsula can be divided into two groups based on whether or not *-yV* is conditioned. The first group, i.e. the one which exhibits conditioned *-yV*, is found in many parts of Saudi Arabia such as al-Qahabah, Rufaidah, Abhā, Tanūmah, Ghāmid, al-Qauz, Rwaiḷī, al-Qaṣīm, Ḥāyil, Riyadh, Najrān, Bīša, Bal-Qarn, and Ṣabyā. The second group, in which *-yV* is used unconditionally, is found in al-ʿAḥsāʾ. Although it is often claimed that this feature is found in Qaṭīf in Saudi Arabia, in addition to other Gulf countries such as the UAE, and Qatar, information on this subject is scarce.

9.2.4 Social constraints on the use of (-i)

Relatively little literature has been written about the possible associations between (-i) and social factors, with only two studies being available. One of these was carried out by al-Bohnayyah (2011) on the dialect of al-Hufūf; the other is the previously mentioned study by Maṭar (1976), on the dialect of Qatar.

Al-Bohnayyah (2011) examined a number of variants in al-Hufūf in relation to age (young speakers 19-35 vs. elderly speakers >50) and gender

(male vs. female). He did not specify whether the participants were Sunnis or Shiites. His (2011, p. 38) results show that young male and female participants do not show any use of [-ya]. Variation takes place only with elderly speakers. Among them, [-i] is the dominant variant (al-Bohnayyah, 2011, p. 39). He (2011, pp. 40–41) adds that elderly males frequently use the [-i] variant in comparison to their female counterparts who maintain the local [-ya] variant.

Maṭar (1976) offered some general observations about the use of [-ya] in Qatar, stating that the use of the [-ya] variant is limited to some tribes living in northern Qatar, mainly the al-Mahānda tribe. Within this group, he found the [-ya] variant to be particularly common among elderly speakers of both sexes (Maṭar, 1976, p. 14). This feature was almost non-existent in the speech of young speakers (Maṭar, 1976, p. 14).

9.3 Data for (-i)

This section will outline the context in which the 1st person singular possessive/object suffix of al-²Aḥsā² Arabic is found. Then, a description will be provided of the different allomorphs of (-i). Details regarding which speakers show variable behaviour and which are categorical will be provided. Following this, a description will be given of how the dependent and independent factors are coded for Rbrul analysis.

9.3.1 Circumscribing variable context

In the Arabic dialect of al-ʿAḥsāʾ, realisations of the 1st person singular possessive pronoun (-i) and the 1st person object pronoun (-ni) are closely related. Realisations of both variables can be divided into two groups based on the presence or absence of [-ya].¹⁵ This is because speakers who have [-ya] will have it with both (-i) as well as (-ni). As such, the (-i) and (-ni) variables were conflated in the analysis. Realisations will be grouped into two variants: [-i] vs. [-ya]. The data has shown that both groups of variants can potentially take place in both pausal and non-pausal positions. A more detailed description of the realisations of each variable will be given below.

The 1st person singular possessive pronoun *-i* may be attached to nouns, demonstratives, prepositions, and particles. There are two types of realisations for the 1st person singular possessive pronoun *-i*. The first type, i.e. the one without *-ya*, includes *-i/-y* and *-ni*. The *-i* realisation is used post-consonantly, as in the cases of *ʿitr-i* ‘my perfume’, *giddām-i* ‘in front of me’, *laʿann-i* ‘because I am’. When *-i* is attached to words ending with the short vowel /i/, instead of having an elongated /i/ that may not be readily aurally perceived as indicating a possessive suffix, the voiced palatal approximant /y/ is inserted and geminated, e.g. *kirsi* → *kirsi-yy-i* ‘my chair’.

¹⁵ In relation to al-ʿAḥsāʾ dialect, the general form [-ya] is selected to transcribe this allomorph, although the final vowel may sometimes be short and indistinct, i.e. it may be realised as /a/, /e/ or /ə/. It may also be sometimes followed by /h/.

When words end with /a/, stem-final vowel is lengthened and -y is added, e.g. *ḥama* → *ḥamā-y* ‘my husband’s brother’, *ma‘a* → *ma‘ā-y* ‘with me’. Occasionally, -ni is used post-vocally. Two instances of this occurred in the data, one with the demonstrative *hāḏi* ‘this f.s.’ giving *hāḏi-ni* ‘here I am (lit. this is me)’, and the other with the preposition *fī* ‘in’ giving *fī-ni* ‘in me’. The second type of realisations, i.e. the ones with -ya, include -ya, -anyə, and -iyə. The -ya realisation is used post-consonantly, e.g. *raqim-ya* ‘my number’, *jīrān-ya* ‘my neighbours’, and post-vocally with a lengthening of stem-final vowel, e.g. *ixū-ya* ‘my brother’, *ubū-ya* ‘my father’. Some exceptions are found with certain prepositions. For instance, /y/ is geminated in the suffix attached to *‘ala* → *‘ala-yya* ‘on me’. The reflex -anyə, which, as will be found below is normally attached post-consonantly to verbs, was used with only one preposition in the data, namely *taww-anyə* ‘I am still not done’. In addition, -iyə was used with two prepositions, namely *jamb* ‘beside’ and *‘ind* ‘at or with’ giving *jamb-iyə* ‘beside me’, and *‘ind-iyə* ‘at or with me’ respectively.

The 1st person object pronoun -ni is attached to verbs as well as active and passive participles. The suffix pronoun -ni has two groups of realisations based on the use of -ya. The first group includes -ni, -i, or -ini. The -ni reflex is the main one and is used both post-consonantly, e.g. *ḏāyag-ni* ‘he annoyed me’, *‘ājib-ni* ‘I have liked it’, *mta‘‘ib-ni* ‘he is exhausting me’, and post-vocally with a lengthening of preceding vowel, *‘aṭa* → *‘aṭā-ni* ‘he gave me’, *mxalli* → *mxallī-ni* ‘he is making me’. Sometimes, /n/ is dropped when the reflex is used in the imperfect and future tense, and is preceded by

/n/ found at the end of the 3rd person plural inflectional suffix *-ūn*, e.g. *ya‘rifūn-(n)i* ‘they know me’, *yibta‘θūn-(n)i* ‘they give me scholarship to study abroad’, or the 2nd person feminine singular inflectional suffix *-īn*, e.g. *tsammīn-(n)i* ‘you name me’, *btijīn-(n)i* ‘are you coming to me?’. The *-ni* and *-ini* reflexes alternate with each other when attached to mono-syllabic perfect verbs whose subject is a 3rd person singular masculine, *šāl-(i)ni* ‘he carried me’, *hazz-(i)ni* ‘it/he shook me’. In relation to the second group of realisations, i.e. the ones with *-ya*, the allomorphs are *-anya*, *-nya*, and *-ya*. Generally speaking, the *-anya* reflex is used post-consonantly, e.g. *xaḏ-anya* ‘he took me’, *‘ājb-anya* ‘I have liked him/it’ *mšaqql-anya* ‘he is making me work’, whereas *-nya* is used post-vocally with a lengthening of preceding vowel, e.g. *‘aṭa* → *‘aṭā-nya* ‘he gave me’, *š-imdarra* → *š-imdarrā-nya* ‘how would I know!’. There are a number of exceptions to the use of *-anya* and *-nya* where *-ya* is used instead. The *-ya* reflex is used with imperfect and future tense verbs after suffixes that end with /n/ such as the 3rd person plural suffix *-ūn*, e.g. *yabūn-ya* ‘they want me’, *byistišīrūn-ya* ‘they will consult with me’, and the 2nd person feminine singular suffix *-īn*, e.g. *tlūmīn-ya* ‘you f.s. blame me’, *bi-tbī‘īn-ya* ‘you will sell me’. With participles, *-ya* is similarly used when preceded by the 3rd person plural suffix *-īn*, e.g. *mšayylīn-ya* ‘they have been making me work’. Verbs ending with *-ūn* or *-īn* are expected to have either the form *-anya* because they are ending with a consonant, or have an optional geminated /n/ giving *-(n)ya* as found with the *-ni* allomorphs. The former case was not found in the data. This may be attributable to the fact that it unnecessarily increases the number of syllables in the word, thereby making it more difficult to articulate. The latter case is

possible, however the majority of instances found in the data show an absence of /n/ in the allomorph. Hence, the form *-ya* is considered to be more representative of the examples that have emerged in the data. The *-ya* reflex is also used with perfect verbs ending with the 3rd person singular feminine pronoun *-at*, e.g. *kallimat-ya* ‘she talked with me’, *xabbarat-ya* ‘she told me’. In perfect verbs, when the subject is a 3rd person singular masculine, either *-ya* or *-anyə* are used post-consonantly. The allomorph *-ya* is suffixed to bi-syllabic verb stems and *-anyə* is attached to mono-syllabic verb stems, e.g. *‘ajab-ya* ‘I liked it (lit. it pleased me)’, *waṣṣal-ya* ‘he took me somewhere’, *ṭagg-anyə* ‘he hit me’, *šāf-anyə* ‘he saw me’. It appears that *-ya*, when it is not preceded by /n/ at the end of *ūn* or *-īn*, is primarily syntactically and morphologically bound to perfect verbs whose subject is a 3rd person singular suffix. However, it also seems possible that some phonological issues are also involved. The allomorph *-anya* is the underlying form and therefore /an/ is deleted when preceded by bi-syllabic verbs in order to reduce the number of syllables and subsequently phonologically facilitate pronunciation.

Another point worth mentioning here is that the internal construction of verb stems may differ, especially in terms of the insertion or deletion of vowels, depending on whether or not they are followed by either *-ni* or *-anya*, e.g. *‘ḍarab* → *‘ḍarab-ni* ~ *ḍru‘b-anya* ‘he hit me’, *‘sāmi^c* → *‘sāmi^c-ni* ~ *sām^l^c-anya* ‘he has heard me’. The allomorph *-anya* consists of two syllables, meaning that it is comparatively long. In order to facilitate pronunciation, the number of syllables in the preceding verb stems is reduced through the deletion of one of the vowels. This subsequently changes word stress, as seen

in the examples. Whether or not vocalic or syllabic changes in the internal construction of verb stems results from the insertion of different allomorphs of *-i* or is just an example of general differences in the syllabic structure of the two Sunnis and Shiites varieties should be the subject of future investigation.

It should be mentioned that there are alternative ways to express possession, such as the use of *māl* and *ḥagg* for the masculine and *mālat*, and *ḥaggat*¹⁶ for the feminine ‘belongs to’, e.g. *māl-hum* ‘theirs’, *mālit-ik* ‘yours’. These expressions may have a 1st person singular possessive pronoun *-i* attached to them as well, e.g. *māl-i* ~ *māl-ya*, *mālit-i* ~ *mālat-ya*, *ḥagg-i* ~ *ḥagg-ya*, *ḥaggit-i* ~ *ḥaggat-ya*. When *-i* is attached to possessive expressions such as *māl*, *ḥagg* etc. they are included in the analysis.

The *-ya* reflex should be differentiated from the particle *iyyā-*, which must have a pronoun suffix attached to it, *iyyāk* ‘you’, or the conjunction *w-* ‘with’ prefixed to it, as in *wiyya*, giving the meaning ‘with’. Sometimes both a suffix pronoun and the prefixed conjunction *w-* are attached to *-iyyā*, e.g. *wiyyāhum* ‘with them’. The particle *-iyyā* may come after the possessive pronoun *-i*, in which case the initial vowel /i/ of *-iyyā* is dropped, e.g. *‘atā-niyyā* ‘he gave it to me’. The difference between this and *‘atā-nyā* ‘he gave me’ is not only in the omission of /i/, but also in the way in which /y/ is geminated

¹⁶ There seems to be a vowel harmony rule where *-at* becomes *-it* when followed by a suffix starting with /i/.

and followed by a long vowel in the *-iyyā* case. Instances of *-iyyā* that follow the possessive pronoun *-ni* are not included in the analysis.

The second issue that needs to be discussed in this section pertains to categorical speakers. As displayed in Table 20, the total number of categorical speakers in the data is 55. Almost all Sunnis (44 speakers (80%)) categorically use [-i]. The only exceptions are two elderly illiterate Sunni females, one of whom is 80 years old and the other is 78. These are the oldest female speakers in the sample, with the remainder being aged 60 and below. One of the elderly ladies lives in a Shiite neighbourhood. The Shiites, eleven categorical speakers (20%), made up of seven females (12.7%) and four males (7.3%), invariantly used [-i]. There were four adolescent female Shiites (7.3%), two of whom were friends. They mentioned during interviews that they used to use the [-ya] variant, but had to stop using it as other students ridiculed them. This strongly suggests that [-ya] is overtly stigmatised. The third adolescent Shiite is a high-achieving student who was found to be categorical with most other variables such as word-stem (k), (g) and (-ik). This student has also expressed her wish to hold a high position in the future. Her wish to stand out may have bolstered her use of the prestigious variants associated with standard Arabic. Similarly, the fourth student is also high-achieving. Regarding the middle-aged Shiite males, both work in a Sunni neighbourhood. They were found to exhibit other features associated with the speech of Sunnis such as [-(a~i)č] and [-(i)k(i)] as opposed to [-(a~i)š] which is more common among Shiites. With regards to elderly speakers, there was one female elderly speaker (1.8%), who is an Arabic teacher. She reported

herself as being very attentive to the way she speaks and how she approximates what she considers as proper standard Arabic.

There were also two young Shiite females (3.6%) who categorically used [-i]. These two are friends. The only remark that distinguishes them from the other females in the same age group has to do with the status of their families and more particularly their fathers, who are educated and work as employees of large businesses, one of whom works at an oil company in aḏ-Ḍahrān and the other works as a lab assistant. This contrasts with the fathers of the other females in the age group, whose fathers are non-educated and work as either farmers or contractors. Being educated and working in a formal institution might have impacted upon the way they attach themselves to prestigious variants and the influence that they may have had consciously or inadvertently on their daughters' speech.

With regards to the elderly male Shiites, the categorical speakers are non-educated. Ideally, non-education is expected to lead participants to maintain the local [-ya] variant, however there appear to be some stronger influences. For instance, one participant said that he used to live in a Sunni neighbourhood. He spoke extensively about how Sunnis and Shiites used to live side by side in the past and how children of both groups used to play together. He also spoke about the strong social ties he had formed with Sunnis. The other elderly Shiite male reported himself as originally belonging to a Najdī tribe. Again, categorical speakers were removed from the analysis.

If findings on groups of categorical speakers were compared to multivariate findings shown in section 9.4.2, the two would be shown to be somewhat compatible. There were three elderly categorical speakers, one educated (1.8%) and two non-educated (3.6%) elderly speakers, and eight younger categorical speakers, four of whom were adolescent (7.3%), two were young (3.6%), and two were middle aged (3.6%) speakers. This demographic split echoes the multivariate results, which show that elderly speakers are the ones who maintain the local [-ya], in contrast with younger speakers, who advance the use of [-i].

Table 20 Categorical speakers of (-i): Speakers using only [-i]

Sunni	Adolescent		Young		Middle-aged		Educated/elderly		Non-educated/elderly		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Male	8	14.5	5	9	5	9	6	11	1	1.8	25	45.3
Female	4	7.3	6	11	5	9	3	5.4	1	1.8	19	34.5
Total	12	21.8	11	20	10	18	9	16.4	2	3.6	44	80.8
Shiite	Adolescent		Young		Middle-aged		Educated/elderly		Non-educated/elderly		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Male	0	0	0	0	2	3.6	0	0	2	3.6	4	7.3
Female	4	7.3	2	3.6	0	0	1	1.8	0	0	7	12.7
Total	4	7.3	2	3.6	2	3.6	1	1.8	2	3.6	11	20
Grand total 55												

9.3.2 Coding

The (-i) variable involves binary variants that can be easily aurally identified; namely [-i] and [-ya]. The only case where the distinction between [-i] and [-

ya] is blurred is when a word ending with *-i* is followed by a vowel e.g. *ubū-y-int* ‘you are my father’, *zōj-y-alli* ‘my husband who is’. All tokens of this type were removed from analysis. In terms of social factors, only two factor groups were considered: age and gender. Socio-sectarian affiliation was not tested because there were only two Sunni speakers who exhibited the [-ya] variant and they belonged to the same age group, i.e. they are both elderly speakers. Including them would have created an enormous amount of non-orthogonality (empty cells), especially when the factor groups of socio-sectarian affiliation, age/education, and gender are cross tabulated. Because of the non-orthogonality, the data would not have been very useful. As such, these two Sunni females were removed from the analysis.

Initially, the age factor consisted of the levels of adolescent, young, middle-aged, educated elderly and non-educated elderly. No significant differences were found between adolescent, young, and middle-aged speakers. Comparing the two models, i.e. the one with a split of younger age groups and the other conflating them, it has been found that the model with fewer parameters provided a better fit of the data. And so, the model conflating younger age groups was adopted.

9.4 Results

In this section, the overall distribution of the [-i] and [-ya] reflexes will be provided. This will be followed by a discussion of the findings from the multinomial mixed- and fixed-effects. The results generally illustrate a clear divide between Sunnis and Shiites in the use of (-i). All Sunnis use [-i]

categorically, except for two elderly illiterate females. Among Shiites, the [-i] and [-ya] reflexes are almost evenly distributed and are shown to be highly correlated with age/education.

The total number of tokens produced by both categorical and non-categorical speakers is 3994. After the removal of categorical speakers, along with the two elderly illiterate Sunni females mentioned earlier, the number of tokens dropped to 1416. The results of the (-i) variable will be presented below. Overall distributional findings will be given first, followed by results from the multinomial mixed-effects and fixed-effects analyses.

9.4.1 Overall distribution of (-i)

Figure 18 clearly shows that the (-i) variable is heterogeneous in the speech of both categorical and non-categorical speakers of al-ʿAḥsāʾ. The use of [-i] (80.3%) surpasses that of [-ya] by a significant margin (19.7%).

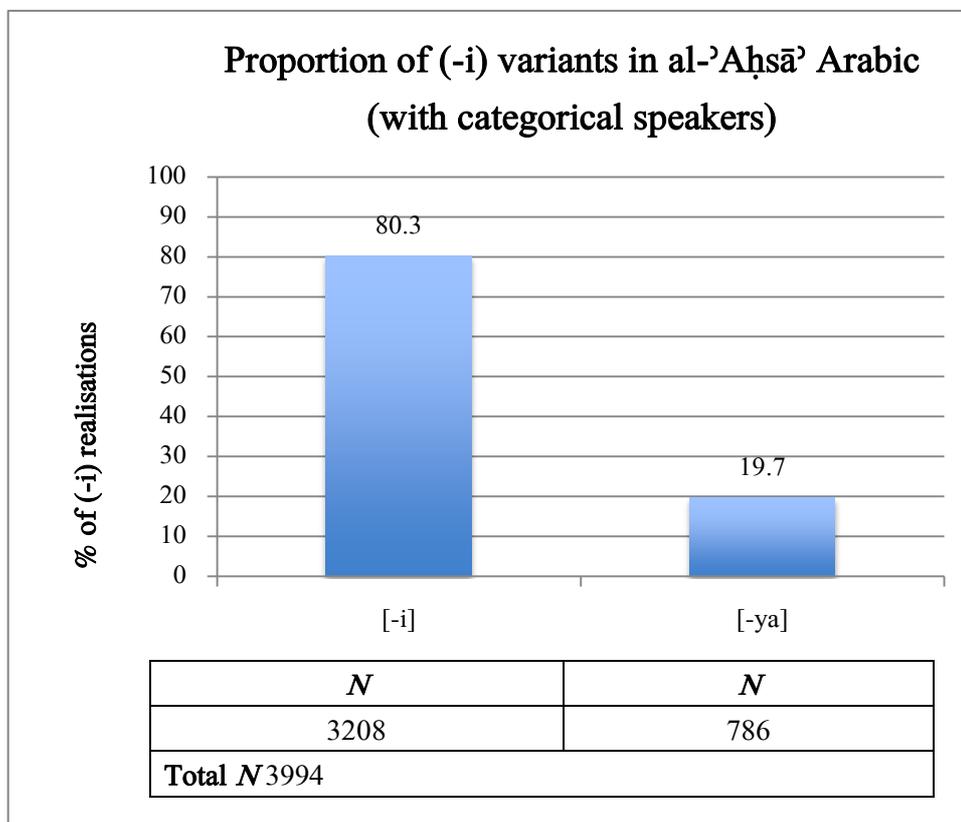


Figure 17 Overall distribution of (-i) in al-ʿAḥsāʾ Arabic (with categorical speakers)

When categorical speakers were removed, the rate of [-i] (47.1%) became much closer to that of the [-ya] reflex (52.89%) (see Figure 19).

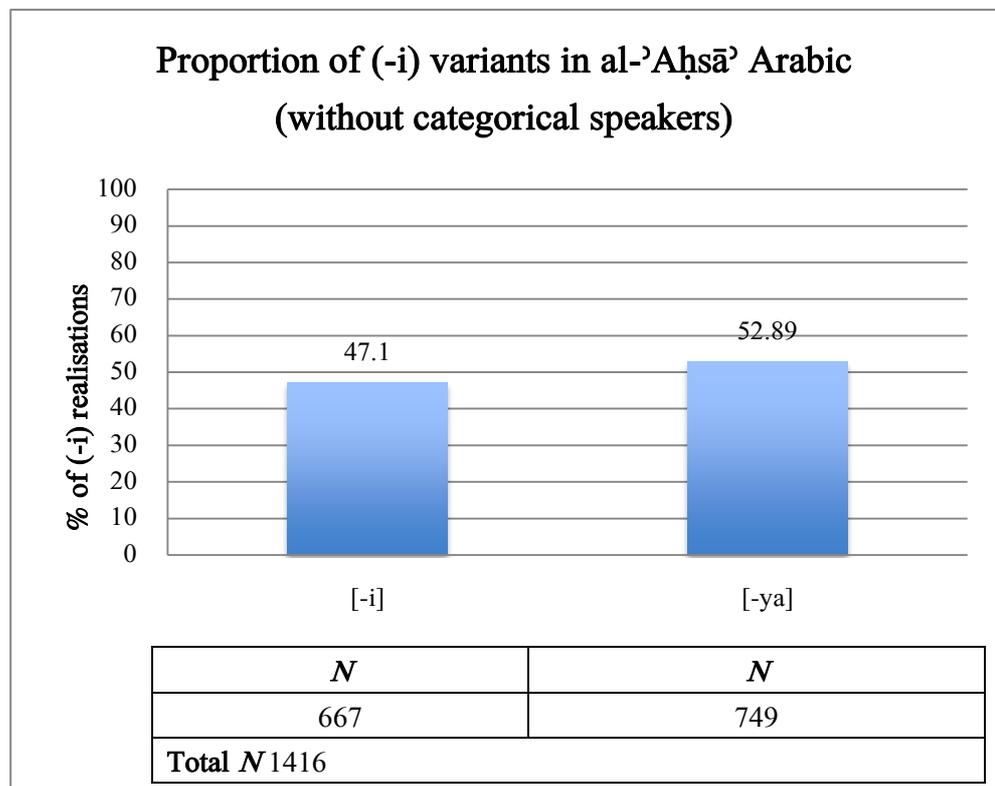


Figure 18 Overall distribution of (-i) in al-'Aḥsā' Arabic (without categorical speakers)

9.4.2 Mixed-effects analysis of (-i)

Results of mixed-effects analysis are given in Table 21, with [-i] as the application value. The results show that only age/education has a significant influence on the use of (-i) among Shiites. Gender does not have a significant impact on participants' use of (-i). These outcomes are discussed in greater detail below.

Within the age/education factor ($p = 1.52e-05$), adolescent, young, and middle-aged speakers (1.748 log odds) are found to highly advance the use of [-i]; compared to educated elderly (-0.482 log odds) and non-educated elderly (-1.266 log odds). Among elderly participants, educated speakers

demonstrated a higher tendency towards using the standard and prestigious supra-local variant [-i] in comparison to non-educated elderly speakers, who were found to maintain the local [-ya] reflex.

The results of elderly participants are in alignment with the findings of Maṭar (1976) who investigated the speech of tribes living in northern Qatar, and al-Bohnayyah (2011) who looked into al-Hufūf dialect. Nonetheless, findings on younger speakers are not entirely the same. Maṭar (1976, p. 14) and al-Bohnayyah (2011, p. 38) have both stated that younger speakers do not use [-ya]. The findings of the present study show that [-ya] is still present in the speech of adolescent, young, and middle-aged speakers even though it is recessive. In relation to gender, the present findings show that gender does not significantly influence the use of (-i) in al-ʿAḥsāʿ Arabic. This contradicts the findings of al-Bohnayyah (2011, pp. 40–41), which show that elderly females maintain the local [-ya] variant and elderly males advance the use of [-i]. Such divergent results may be attributable to differences between the groups of speakers investigated in each study. The present analysis deals only with Shiites, whereas al-Bohnayyah did not specify whether the participants were Sunnis or Shiites. In addition, the participants in this study belong to both al-Hufūf and al-Mubarrāz, whereas al-Bohnayyah’s participants were only drawn from al-Hufūf.

Table 21 Mixed-effects results of (-i)

Total N 1416	Deviance 1328.747	df 4	Grand mean 0.471		
Individual Speaker Standard Deviation 1.308					
Factor group	Factors	Log odds	N	Proportion of application value	Centred factor weight
Age/education p = 1.52e-05	Adolescent, young, & middle-aged	1.748	874	0.665	0.852
	Educated/elderly	-0.482	56	0.232	0.382
	Non-educated/elderly	-1.266	486	0.150	0.22
Not selected as significant: Gender					

9.4.3 Fixed-effects analysis of (-i)

A fixed-effects analysis was conducted in order to determine whether gender was not selected as significant due to individual differences. The findings resembled the outcomes of the mixed-effects analysis. Adolescent, young, and middle-aged speakers (1.433 log odds) are found to display a high usage of [-i] compared to educated/elderly (-0.448 log odds) and non-educated/elderly (-0.985 log odds) speakers (see Table 22).

Table 22 Fixed-effects results of (-i)

Total N	Deviance	df	3	Grand mean	
1416	1586.83			0.471	
Factor group	Factors	Log odds	N	Proportion of application value	Centred factor weight
Age/education p = 2.23e-81)	Adolescent, young & middle-aged	1.433	874	0.665	0.807
	Educated/elderly	-0.448	56	0.232	0.39
	Non-educated/elderly	-0.985	486	0.150	0.272
Not selected as significant: Gender					

9.5 Conclusion

This chapter provided an investigation of the variation in the use of the 1st person singular possessive/object pronoun (-i) in al-ʿAḥsāʿ Arabic. This specific variable demonstrated an extreme case of linguistic divergence between Sunnis and Shiites, as [-ya] was almost exclusively used by Shiites. Among this group, alternations between [-i] and [-ya] have been shown to be determined by age and level of education. Adolescent, young, and middle-aged speakers were the most innovative speakers as they widely used the prestigious and supra-local reflex [-i]. Elderly speakers, on the other hand, exhibited conservatism as they maintained the local [-ya] reflex. The age results are suggestive of a change in progress towards the Sunni variant.

Chapter 10 Conclusion

10.1 Introduction

The purpose of this study has been to apply data-based sociolinguistic methods to the Arabic dialect of al-ʿAḥsāʾ. The intention has been to explore the social distribution, and where pertinent the linguistic constraints, of multiple linguistic variables in al-ʿAḥsāʾ Arabic. The primary motivation for the present research is to link the sociolinguistic context of al-ʿAḥsāʾ to broader theories of linguistic variation and change, especially those related to dialect contact, convergence vs. non-convergence or divergence, dialect levelling, koinéisation and so forth. This concluding chapter includes an overview of the findings, as answers to research questions (section 10.2), some broad theoretical implications (section 10.3), and some key suggestions for future studies (section 10.4).

10.2 Overview of empirical findings

The main empirical mixed and fixed-effects findings are chapter specific and were summarised within the respective chapters. This section will therefore endeavour to synthesise the mixed-effects empirical findings on the (k), (g), (ɣ), (-ik), and (-i) variables as answers to the research questions, which were stated earlier in Chapter 1, as follows:

- 1. To what extent do speakers of al-ʿAḥsāʾ linguistically converge or diverge from each other in relation to the local variants of the previously cited linguistic variables? In cases of dialect divergence,**

how do linguistic variations quantitatively correlate with the social factors of socio-sectarian affiliation, age, education, and gender?

The findings of this study demonstrate that the local variants of (-i), (-ik), and (y) have social correlates that are typical of stable linguistic variations associated with dialect divergence, especially considering that some of these variables are simultaneously under pressure of supra-local norms (see answer of the 2nd question below for more details on potential changes in progress). The use of the (-i) and (-ik) variables represent extreme cases of dialect divergence between Sunnis and Shiites. Almost all Sunnis, except for adolescents in their specific use of the (-ik) variable (see answer of the 2nd question), exhibit a high usage of the more prestigious local variants. However, Shiites were found to vary with regards to the use of the prestigious and non-prestigious local variants. The variation in the use of (-ik), and (-i) among Shiites seems to be governed by social motivators. With the (-i) variable, a potential change in progress seems to be under way (see answer of the 2nd question). As to the (-ik) variable, adolescents highly associate themselves with the local Shiite reflex, which to them bears a form of covert prestige.

A different pattern of social correlation occurs with the (y) variable, where gender is found to be the only influential factor, with males approximating the standard variant, which happens to match the supra-local variant, more than females. This seems to be contradictory to gender findings obtained with (k) and (g), which are more likely to be undergoing a change in

progress. In this case, females, mostly younger Sunnis, advance the change towards the supra-local variants regardless of whether or not they were standard.

2. How do speakers of al-'Aḥsā' react to the supra-local linguistic variants of the aforementioned linguistic variables in terms of convergence or non-convergence, and how do such reactions quantitatively relate to the social factors of socio-sectarian affiliation, age, education, and gender?

Four variables are found to show salient modes of competition between local linguistic norms and incoming features, namely, (k), (g), (-ik), and (-i). The patterns of social correlations that these variables have are suggestive of a change in progress. In relation to the (-ik) variable, the types of shifts involved are in terms of the variations between the supra-local and local features. Regarding the (-i) variable, diversity is considered only within the Shiites group. As discussed in the answer to the previous question, the (-ik), and (-i) variables are simultaneously engaged in forms of stable linguistic variations: (-ik) in terms of the variation it has between local reflexes, and (-i) in terms of the extreme divergence it has between Sunnis and Shiites.

Overall, the findings show that the younger the Sunnis, the more likely they are to approximate supra-local features. In contrast, the older the Shiites get, the more they seem inclined to maintain local variants. The findings on gender are not uniform across variables, however. With (k) and (g), females

commonly use supra-local features, whereas males are more conservative and attached to local norms. No significant gender correlations are found with the (-ik), and (-i) variables. It is quite common in sociolinguistic studies to have gender correlations vary from one variable to the other (Eckert, 1989b, p. 248). In this particular case, differences may relate to the degree of recessiveness of local variants, more in the case of (k) and (g) compared to (-ik), and (-i). In other words, it could be the case that the role of gender is more apparent when recessive variations are involved than with variations in the earlier stages of change. With regards to the elderly age group, the role of education has been found to affect the use of (k), (g), and (-i), but not (-ik). The reason behind this is that (-ik), unlike the other variables, may involve a morphosyntactic function of showing the difference between male and female addressees that would otherwise be missing, i.e. (-ik) is resistant to change as an act of avoidance against gender neutralisation.

The answers to questions one and two clearly indicate that dialect convergence and non-convergence/divergence are associated with social factors. This shows agreement with past research on this matter (cf. al-Qouz, 2009; Christen, 1998; Germanos, 2007; Labov & Harris, 198; Nardy et al., 2014). The present study adds a further contribution by showing that it is possible to demonstrate such processes over two dimensions: convergence and divergence in local linguistic features associated with stable linguistic variation; and convergence and non-convergence with supra-local features associated with possible change in progress.

The reason why females engage in a change with (k) and (g) but not with (y) relates to the fact that (k) and (g) are associated with prestige whereas (y) is linked with standardness. This is related to the saliency of variables involved. With (k) and (g), the supra-local variants are radically phonetically distinct from the local variants, both in terms of place and manner of articulation. In contrast, the fundamental difference between the variants of (y) is in terms of manner of articulation.

3. Does phonetic environment have an influence on word-stem (k) and (g) depalatalisation in al-ʿAḥsāʿ Arabic?

Although this study is basically driven by a focus on the effects of social factors on linguistic variation, linguistic determiners were studied where relevant. The present findings on al-ʿAḥsāʿ Arabic show that palatalisation of (k) and (g) in word-stems is quantitatively recessive and is qualitatively highly limited to a fossilised set of lexical items that are analogically extended to relevant derivations and inflections. Given this, in addition to the fact that a large proportion of lexical items studied were obtained via picture elicitation tasks, it is difficult at this stage to consider the influence of palatalisation based solely on phonetic grounds without the intervention of lexical influences. However, it may be said that within the set of lexical items where palatalisation is attested in the present corpus, depalatalisation is not influenced by phonetic environment. Hence, the internal linguistic constraints on the use of (k) and (g), as represented by phonetic environment and the presence or absence of high front vowels, are weak. This comes as a result of

the advanced stage of geographical diffusion of the supra-local variants of (k) and (g). These supra-local variants are said to be part an assumed to be developing regional koiné.

4. Does style have an influence on the use of (k) and (g) in al-'Aḥsā' Arabic? And how?

The results of this study show that style does not significantly influence the use of (k). With reference to (g), the findings indicate that participants significantly shift in style, and avoid the use of palatalised variants, as they move from conversations to picture elicitation tasks. This pattern reveals that the palatalised variant of (g) is more stigmatised than the palatalised variants of (k). This comes in no surprise, as interviews have shown that (g) is more sensitive to style than (k), especially in relation to the shift to Modern Standard Arabic, where many speakers use MSA [q] while still maintaining the palatalised variants of (k). For this reason, (k) can be considered as being an indicator on grounds that it reflects social background without showing variation across different speaking styles. On the other hand, (g) is a marker correlating not only with social group but also with style of speech.

10.3 General theoretical implications

The application of sociolinguistic methods to different linguistic and social settings gives rise to important theoretical implications that can increase our knowledge of the multilingual mechanisms underlying linguistic variation and change. The investigation of the interplay between social factors and

linguistic variation as represented by al-ʿAḥsāʾ Arabic contributes to our understanding of the particular regional investigation of salient linguistic variables and the way they are affected by some locally oriented social settings. It also yields important insights relevant to the wider field, especially in relation to theories of dialect contact, ongoing linguistic change and stable linguistic variation, as well as the associated underlying mechanisms such as transmission vs. diffusion, leveling out vs. maintenance of regional markers, and convergence vs. non-convergence or divergence.

What can be generally concluded, based on the the findings of previous literature, along with some fresh insights provided by the findings of the present study, is as follows. Stable linguistic variation or dialect divergence can be influenced by social segregations related to factors such as ethnicity (cf. Labov & Harris, 1986), religion, gender (cf. Germanos, 2007), and socio-sectarian affiliation (cf. Holes, 1987). The present study has found that stable linguistic variations can be particularly affected by socio-sectarian affiliation and gender. The findings also show that localised dialect divergences, as well as existing convergences, may co-exist with the pressures of convergence or non-convergence with supra-local norms. According to Trudgill (1986), dialect convergence can lead to new-dialect formation or koinéisation. Trudgill (1986) builds on Giles' (1973, p. 90) model of linguistic accommodation in one-to-one interactions. This is based on the assumption that, in interactions of this sort, speakers converge with each other when they have favourable attitudes, and diverge from one another when they have unfavourable attitudes. Trudgill (1986) extends this model to include

long-term linguistic contexts that can yield linguistic change. In relation to the present study of the al-ʿAḥsāʾ context, the degree of linguistic convergence with supra-local norms has been found to be largely dependent on the presence of mutual socio-sectarian background. Sunnis, who share the same socio-sectarian affiliation with the larger Saudi population, are more likely than Shiites to converge with supra-local features. Among Sunnis, younger females have a stronger tendency to associate themselves with the supra-local prestigious variants. Within the Shiites group, older, non-educated males tend to strongly sustain local variants. This supports the findings of past research, as many sociolinguistic studies have shown that females are more innovative and attached to prestige than males (cf. J. Holmes, 1997; Labov, 1966b; Trudgill, 1985; W. Wolfram, 1969; W. Wolfram & Fasold, 1974).

Finally, findings of the current study demonstrate that age and/or education can affect linguistic variation. This comes in line with earlier literature where age and or education have been reported to play a significant role in stratifying linguistic usage (cf. Abdel-Jawad, 1981; Alessa, 2008; al-Muhannadi, 1991; al-Rojaie, 2013).

10.4 Limitations and future research directions

This study tackles issues concerning the relationship between linguistic variation and social factors, as found in the speech of the inhabitants of al-Hufūf and al-Mubarraz in al-ʿAḥsāʾ. However, the study has a number of limitations. For instance, during the interviews it was not possible to pose questions related to the types of social networks involved across the Sunni

and Shiite's dichotomy. This is because the discussion of sect is considered to be a social taboo in al-ʿAḥsāʾ community. The situation is exacerbated by a current political tension between Sunnis and Shiites caused by acts of rebellion carried out by some Shiites in 2011. As a consequence of this, asking questions related to sect will invariably cause participants to feel suspicious or withdraw from interviews, especially given that they are being digitally recorded. In relation to research methods, it was not possible to have interviewers that match the same social background of participants to avoid any possible accommodations. The reason behind this relates to the difficulties involved in recruiting both interviewers and participants, and because of the nature of one of the variables elicited, i.e. the 2nd person singular feminine object/pronoun, which necessitates having a female interviewer (see section 5.1.1.2). Such influences were mitigated by having interviewers with a high degree of familiarity with participants and by using pair and group interviews. Another limitation relates to the lack of ability to incorporate qualitative methods such as participant observation into the research. This is explained in terms of the macro-level purpose of the study, as well as the nature of the community under investigation, which does not approve of having extended interactions between females and non-close male relatives (see section 5.1.1.3). The exclusion of categorical speakers from statistical analysis represents another limitation (see section 5.1.2.1) However, the incorporation of non-variable behaviour was considered beyond the scope of the present variationist study.

A further limitation relates to the ability of apparent time findings on al-ʿAḥsāʾ Arabic to accurately predict future patterns. Synchronic predictions may succeed or fail to manifest diachronically, depending on the continuation or change of social conditions. If a social situation persists, then it is very likely that an anticipated linguistic change will run its course. However, a shift in social circumstances, may cause expected linguistic changes to be discontinued, reversed, or even follow a new direction. If we look at depalatalisation processes in the dialect of al-ʿAḥsāʾ as an example, we will see that in relation to (k) and (g), where change is almost finalised within the adolescent and young age groups, especially among Sunnis followed by Shiites, change is expected to persist in the future. In other words, there is an expectation that the rest of adolescent Shiites will follow, and that non-palatalised forms will be subsequently transmitted to future generations in both groups. The same applies to the case of (-ik) depalatalization, which is less advanced than (k) and (g). Depalatalization of this variable is nearly complete among adolescent and young Sunni speakers, but not among Shiites. The (-ik) variable is expected to follow the same pattern as (k) and (g), i.e. that adolescent and young Shiites will eventually categorically depalatalise (-ik) and that both adolescent and young Sunnis and Shiites will eventually pass this categorical use on to newer generations. However, the occurrence of a social change, such as the development of a conflict between the two socio-sectarian affiliations in Saudi Arabia, could result in the three variables not following expected patterns. Instead, they might freeze or even reverse direction.

As to future research, several issues require further investigation. For instance, there are additional linguistic features that merit investigation in this context, such as the phonological alternations [a ~ ʌ], [q ~ ɣ], and [d ~ dd], and the morphophonemic variation observed when the 3rd person feminine singular suffix pronoun is attached to consonant-final stem [t-ha ~ tt-a]. There are also a number of potential linguistic determiners worth investigating, such as lexical priming, in which corpus linguistics analysis methods are used to investigate lexical collocations or lexical structure (cf. Hoey, 2005). It might also be interesting to examine whether any correlations exist between variations in lexical priming and social factors. In addition, it would be worthwhile to expand the study of style to include other variables and add further stylistic levels. Style is an integral concept in sociolinguistics especially given that it can index social differences. The study of style might therefore potentially help us to gain deeper insights into saliency and why variables differ from each other, i.e. shifts in style can indicate the level of awareness attached to the variable involved. A linguistic study can be conducted to examine the phonetic environment of (k) and (g), where a wider range of words can be included to cover both contexts where variation occurs as well as those in which it is entirely absent. In relation to the [-ya] variant, further studies should be carried out in other areas in Saudi Arabia such as Qaṭīf, in addition to other Gulf countries, like Qatar and the UAE, in order to pinpoint the areas of its use, and to more clearly map out the similarities or differences between these various dialects in terms of the grammatical context of *-ya*.

Further research could also be carried out to examine the influence of additional social factors, such as settlement type, i.e. city vs. village or hamlet, and to extract any further existing social groupings that could be based on tribalism or city of origin, e.g. al-Hufūf and al-Mubarrāz, and Bedouins vs. sedentary. Within the larger speech community of al-ʿAḥsāʾ, there could be nested speech communities such as Sunnis, Shiites, males, females, and different age groups. Each of these merit their own sociolinguistic investigation, where more participants are included. Expanding the geographical perspective to include other areas in Saudi Arabia may also provide further insights into possible processes of spatial diffusion, i.e. the urban hierarchy model vs. wave-like diffusion. Another area of interest would be the underlying ideologies and attitudes informing the linguistic choices of al-ʿAḥsāʾ speakers.

Diachronically speaking, future studies on al-ʿAḥsāʾ dialect could provide real-time evidence for or against linguistic change as opposed to age grading. While previous descriptions of al-ʿAḥsāʾ dialect do exist, as provided by dialectologists such as Johnstone (1967) and Prochazka (1988), there is very little hard evidence about the past. This limits the degree to which we can fully understand the extent to which the al-ʿAḥsāʾ dialect is currently undergoing change. Future studies should therefore help to trace existing variations and their future development. In combination with other research in the area, such studies could hopefully enable us to reach some general inferences about patterns of stable variations, and to detect possible directions of linguistic change.

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Appendix A. Picture elicitation task

Below is a list of the pictures used in the present study to elicit words containing the (k) and (g) variables, which come as part of phonoleixcalised sets (see section 5.1.1.3).



gid(i)r 'pot' & *kabsa* 'a rice meal'



birka 'pool' & *sīgān* 'legs'



ḥarīga 'fire' & *giddām* 'in front of'



kibīr 'big' & *birīg* 'jug'



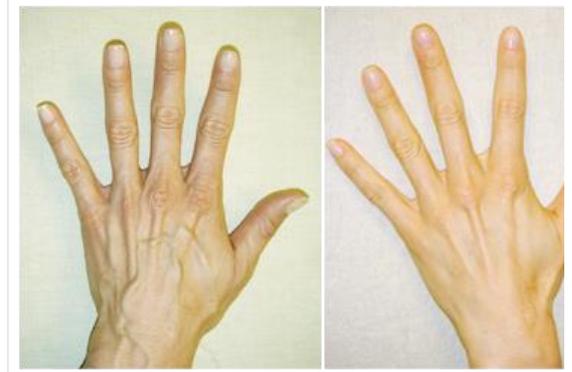
ʕōg ‘dates raceme (a bunch of dates)’



yabkī ‘he is crying’, *ħalg* ‘throat’ & *ħlūg* ‘throats’



dīk ‘cockerel’ & *dyūk* ‘cockerels’



BEFORE

AFTER

ʕīrg ‘vein’ & *ʕūg* ‘veins’



simak ‘fish (collective)’ & *kīsa* ‘bag’



ʕīlk ‘chewing gum’ & *ʕūk* ‘pieces of chewing gum’



gibla 'the direction of Makkah'



katif 'shoulder' & *θigil* 'heavy'



sikkīn 'knife' & *smika* 'a fish'



ṭirīg 'way' & *kalb* 'dog'

Appendix B. Quotations as ethnographic evidence

Quote 1 produced by a young Sunni female

“*ʿana mumkin ʿatqabbal il-kāf ʿila ča...bass mā ʿatqabbal iθ-θānya [[j]] yaʿni...yaʿni tihūn ʿindi...ʿašūf ʿinna ʿādi mumkin ʿatqabbal il-kāf illi yiyayyrūnha bass mā ʿatqabbal iθ-θānya [[j]]... ʿaḥiss šaʿba tayyīr il-ga...yaʿni hī ʿasāsan ʿana binnisba li il-ga mā ʿaḥibbha...mū šaʿba bass yarīb nuṭgha...falamma tityayyar baʿad...la...tišīr sayʿa marra.*”

‘I might accept the [k] to [č]...but I don’t accept the other [[j]] I mean...I mean it is less horrible...I think yes I can normally accept the [k] that they change but I do not accept the other [[j]]...I think it’s difficult to change the [g]...I mean principally for me I don’t like the [g]...it’s not difficult but its pronunciation is strange...and when it changes even more...no...it becomes really bad.’

Quote 2 produced by a middle-aged Sunni male

“*yimkin iṣ-ṣōt iθ-θāni [[č]] ʿahwan ʿaw kiḏa...yaʿni dārja fi il-Ḥasa...yaʿni maqbūla ʿindi ʿakθar min il-ja [[j]].*”

“maybe the other sound [[č]] is more agreeable...I mean its common in al-ʿAḥsāʿ...I mean more acceptable to me than [j].”

Quote 3 produced by a young Sunni male

“*jumal miθil ḥawwam čabdi u rūḥi jibīli čīs...hāḏa ’ahwan min il-jumal illi fiha iṭ-tirīj...u ’iḏij...la’...hāḏi mā ’afaḏḏilha...muš mustasāya wala laṭifa binnisba li ’abadan.’*”

“phrases like *ḥawwam čabdi* ‘he made me feel disgusted’...and *rūḥi jibīli čīps* ‘go bring some chips’...this is more agreeable than phrases with the word *iṭ-tirīj* ‘the way’ and *’iḏij* ‘date raceme’ ...I don’t favour this one...it is not acceptable and not nice to me at all.”

Quote 4 produced by a young Sunni female

“*iš-šī’a mitmassikīn b’ādathum u taqalīdhum u ’umūrhum id-dīniyya ’akθar minna..u hāḏa yi’aθθir...ya’ni lamma ’akūn mutamassika b’āšyā’i y’aθθir ḥatta bi-l-lakna wi-l-lahja...faya’ni hum ’ādi ’ēš fiha lamma nitkallam kiḏa...iḥna kiḏa...iḥna lā bil’aks...lamma tiṭla’ kilma jidīda ’aw yityayyar ’alēna il-kalām...nhāwil ’inna nkūn nafs il-mustawa ma’ illi nit’āyaš ma’hum...famā nḥibb nikūn ’aqall minhum...wi-nlāḥiḏ ya’ni ḥatta lamma ’aḥad yigūl hal kalām nlāḥiḏ ’alēh wi-ndaqqiq...fahaḏa šayy yifarrig bēna u bēnhum...yimkin it-tarbiya wil-’iša laha dōr...ya’ni hum yitrabbōn ’ala ittamassuk b’adāthum mahma kān u yadxil min ḏiminha il-mulkiyya wi tbayyin ’inn-hum yiftaxrōn billi inwaldaw ’ale...iḥna ’indina nit’aθθar bilwagt il-ḥāli...’iḏa il-’āmmah wil-’aylab yantiḡūn il-kilma kiḏa nāxiḏha minhum...wi-nḥāwil nikūn bnafs ilmustawa...’akshum.’*”

“Shiites hold more into their own costumes and traditions and religious stuffs than us...and this effects...I mean when I hold on to my stuff this effects even the dialect and the vernacular...so they feel its alright to speak like that...we [Shiites] are like this...we [Sunnis] are unlike them [Shiites]...when a new word appears or the speech changes...we [Sunnis] try to be on the same level with the people whom we live with...we don’t like to be less than them...and we notice I mean even when someone speaks in this way we notice them and we are very particular...this thing differentiates between us [Sunnis] and them [Shiites]...maybe the way we are raised and the way we live have an effect...I mean they are raised to hold on into their own traditions no matter what and that includes the possessive and this shows that they are proud of what they are raised with...we get effected by the mean time...if everyone or the majority speak in a certain way, we take it from them...and we try to be on the same level...unlike them [Shiites].”

Quote 5 produced by an elderly Sunni male

“*ta’aθθur is-sinna... is-sinna ta’aθθurhum b-Najd ’akθar...il-’intimā’ id-dīni y’aθθir liyawīyyan...law gālōli ’ēš marji’ik?...lawēn tirja’?...bagūl Najd...fiha maḏhab ḥanbali...hum [Shiites] la’*”

“Sunnis are influenced...Sunnis are more influenced by Najd...religious affiliation affects the language...if they ask what is your religious authority?...to whom do you go back to?...I would say Najd...it has the *Ḥanbali* school...they [Shiites] don’t.”

Quote 6 produced by a middle-aged Sunni male

“*iḥna nityayyar ma‘a bāgi in-nās..li’anna iḥna mixtalfin maḏhabiyyan...bṭariqa ijtīmā‘iyya ‘akṯar...iḥna nḥiss ‘inn-u iḥna nintimi l-is-Su‘ūdiyya ‘akṯar* [than Shiites].”

“we change along with other people...because we [Sunnis] are different in terms of sect [from Shiites]...more in a social way...we feel we belong to Saudi more [than Shiites].”

Quote 7 produced by a young Shiite female

“*min id-dirāsa...fi banānt min ir-Riyāḏ...min Bgēg...min il-Jbēl...min manātiḡ mixtalfā fi Jāmi‘at il-Malik Fēṣal...u kill waḥda lahjatha tixtilif...mub min il-Ḥasa fil-jām‘a...mu bass min manṭiḡa waḥda...fa-‘akīd kill waḥda tixtilif ‘an iṯ-ṯānya...ṭab‘an niḥtifiḏ blahjatna...šayy kān u ta‘awwadna ‘alē...binḥāwil nyayyira...ša‘b nyayyira min jidd u jidīd...xalāš...hāḏi lahjatjna ma tityayyar...ya‘ni xalāš ‘aḥiss inwaladt u tirabbēt ‘alēha...u ‘aṣlan ‘ajbatni mub ‘inn-ha mubālay fiha...mub anḥirij lamma atkallam...ana lahjiti kiḏa...xalāš...illi yiyayyrūn lahjathum...brāḥathum...mub wāṯqīn min nafishum wala wāṯqīn min kalāmhum...šayy mub lak ma ylig fik...‘akīd bya‘rifūn ‘ana mīn...‘ana wāṯqa šinu bagūl...‘ana ‘ārfā šinu ‘indi.”*

“from education...there are girls from Riyadh, from Bgēg, from al-Jubayl...from different areas at King Faisal University...and each has their own dialect...not from al-‘Aḥsā’ at University...they are not only from one area...so surely each is different from the other...of course we should keep

our dialect...something old and we are used to it...to try to change it...its difficult to change it and start all over...that's it...this is our dialect and it doesn't change...I mean I was born and raised using it...and I like it it's not over exaggerated...I am not embarrassed to use it...this is my dialect...that's it...those who change their dialects...its up to them...they are not confident of who they are and the way they speak...something that is not yours is not appropriate to you...surely they will know who I am...I am confident of the way I speak...I know what I have.”

Quote 8 produced by a young Sunni female

“*’ana ’astaxdim il-ič...w-’agōl šlōn-ič...šaxbār-ič...kiða ya’ni...lēš ’astaxdimha...lēš ’astaxdim il-ič...’a’tiqid manāṭiqiyyan...bima ’ann is-Su’ūdiyya ’umūman titmaθθal bi-’inn-ha titkallam bil-kāf lahjat il-’āšma...illi hi Najd...baynama ihna bqurbna min il-xaliġ...ihna nistaxdim il-ič hāḏi tmaθθilna...ṭab’an il-jām’a fiha min kāffat il-manāṭig...fi il-bidāya lil’asaf...ḥāli ḥāl kill in-nās...il-lahja il-bēḏa...šlōn-ik šaxbār-ik...bil-kāf la’anni ma ’amūn ’ala ’aḥad fihum...θumma tadrījiyyan ma’a iṣ-ṣadiqāt il-muqarrabāt bidēt ’atkallam b’ariḥiyya...illi hi il-ič...il-’ān mumkin ’atkallam ma’ il-kill...sawā’ diktōra ’aw zamīla ’aw ṣadiqa..sirt ’atkallam ma’hum bil-ič...ma ṣār ’indi muškila ’aw taḥarruj...li’asaf ihna ṣār ’indina il-xajal il-’aḥsā’i min nafsa...fi ’ayy šayy...min ’inna yaḏkir ’inna ’aḥsā’i ’ala mistawa il-mamlaka...’aw min ’inn yiḏhir lahjita il-’umm ’ala mistawa ’aṣḥāba...xuṣūan il-’alifiyya il-’axīra min ’alfēn wi θna’aš...’alfēn u xamiṣta’aš...il-’ān tara in-nās tadrījiyyan bidat tafqid simat lahjatha...ha-ššayy n’āni minna...il-kalām*

*ʾiṭlāqan muš ʾiḥsāʾi...il-ik simat il-bint il-miṭḥaḍra..u ma zālat hāḍi il-fikra
 bilmunāsaba mawjūda...il-lahja il-bēḍa...ʾinn-ha titkallam bil-kāf...ʾinn-ha
 tidʿam kalāmha bil-mufradāt in-Najdiyya...ʾaw il-mufradāt is-Suʿūdiyya il-
 ʿamma...lākin ma fiha in-nakha il-ʾiḥsāʾiyya...ʿindihum mustawa taxalluṣ u
 taḥarruj min il-lahja il-ʾiḥsāʾiyya...ʾana tadrījiyyan bidet ʾašʿur...ʾinn-u hāḍa
 yifqidni miṣdāqīti...kill ma tikallamt blahjiti il-ʾumm illi ʾatkallam fiha maʿ
 ʾummi fi bēti kill mā kān hāḍa iṣ-šayy ʾagrab...lēn ʾaxaḍt iθ-θiqa...hāḍi
 ʾana...u hāḍi lahjiti...u hāḍa kalāmi...rāḥ ʾatkallam bhāḍa maʿ ʾayy ʾaḥad... il-
 banāt ʿumūman ma zāl ʿinduhum haḍa il-ḥaraj...il-ʾiḥsāʾi ʿumūman ʿinda ḥaraj
 manāṭiqi ʾaṣlan...liʾan il-ʾiḥsāʾi yēr mufaḍḍal fi il-mamlaka ʿala fikra...in-nās
 tiḥtirim ṭibta...tiḥtirim ʿafawīta...lākin ʿala ṭul naḍrathum lil-ʾiḥsāʾi...ʾinna
 naḍra ṭāʾifiyya...naḍra dūniyya...fa il-ʾiḥsāʾi yiṭharraj u yiḥāwil yastir hāḍa iṣ-
 šayy bkalāma..yaʿni nigūl maḍalan ʾana gāmṭa min iṣ-šayy il-
 fulāni...la...gāmṭa miš ʾiḥsāʾiyya ʾasāsan...maḍalan sāmja...baḍra...yaʿni min
 miṭa iḥna nitkallam kiḍa?...hāḍi muš ʾiḥsāʾiyya ʾasāsan...hāḍi ʾašyāʿ killaha
 ḍharat fi elfēn u sabʿa maʿa il-masinjir...maʿ it-taʿarruf min xilāl ič-čāt maʿ in-
 nās min il-manāṭig il-ʾuxra...ʾakḍar fi Twitar...alfēn u ʿašra taʿallamna
 kalimāt jidīda... rāḥ ʾatkallam bhāḍi il-lahja...maʿ ʾayy ʾaḥad u min ʾayy
 mantiga u hāḍa iṣ-šayy illi ʾsawwih...yaʿni il-ʾān is-sawšal mīdya xallat ʿindi
 ṣadāqāt kiḍira min il-Ḥijāz min ir-Ryāḍ...min kill mikān...ʾatkallam liʾanni
 ʾašūf ʾinna māfi ʾaḥad tarak lahjita...il-Jinūbi yikallmni bšakil Jinūbi...wil-
 Ḥijāzi yikallmini bšakil Ḥijāzi....u laʾannha ṭariyya u ḥilwa fi il-fām....u ʾana
 ʾašaddig nafsi lamma ʾatkallam blahjiti...min lamma ʾatkallam lahja
 ḍānya...ʾfqid miṣdāqīti...lamma ʾatrik il-ič hāḍi...ʾafqidha.”*

‘I use the *-iĉ*...and say *šlōn-iĉ* ‘how are you f.s.’...*šaxbār-iĉ* ‘how are you f.s.’...like this...why do I use it...why do I use the *-iĉ*...I think areally...as [k] represents the speech of Saudi generally and the dialect of its capital...which is Najd...because of our closeness to the Gulf...we use the *-iĉ* which represents us...of course the university includes people from all over areas...at the beginning regretfully...like everyone else...the *lahja il-bēḏa* ‘koiné’ (lit. white dialect) ...*šlōn-ik* ‘how are you f.s.’ *šaxbār-ik* ‘how are you f.s.’...with [k] because I don’t have a close relationship with anyone...afterwards I gradually started to speak freely with my close friends...that is to use the *-iĉ*...I don’t have a problem or feel embarrassed...unfortunately we started to feel ashamed of ourselves...in any thing...in mentioning that they are from al-ʿAḥsāʾ on a Kingdom level...or to show their native dialect at the level of their friends...especially lately in two thousand and twelve... two thousand and fifteen...people started to gradually lose the characteristics of their dialect....we are suffering from this ...the speech is not ʿiḥsāʾī... the *-ik* is a feature of the civilised girl...by the way this notion still does exist ...the *lahja il-bēḏa* ‘koiné’ (lit. white dialect)...that she speaks with [k]...that she supports her speech with Najdi words...or the general Saudi words...but it does not have the ʿiḥsāʾī flavour...this is missing unfortunately...they have a level of elimination and embarrassment of the dialect of ʿiḥsāʾī...I am starting to gradually feel that this takes away my credibility....every time I talk with my native dialect the one I use with my mother at our house the more I feel its close...until I became confident...this is me...this is my dialect...this is my speech...I will speak this way with anyone... Generally girls are embarrassed... the ʿiḥsāʾī

generally have a feeling of areal embarrassment...because the ʾiḥsāʾī is not preferred in the Kingdom by the way...people respect their kindness...their spontaneity...but their perspective of the ʾiḥsāʾī...is a sectarian perspective...is an inferior perspective...so the ʾiḥsāʾī is embarrassed and tries to cover this with his speech...so we say for example ʾana gāmṭa min iṣ-ṣayy il-fulāni ‘I am afraid of that thing’...no...gāmṭa ‘afraid.f.s.’ is not ʾiḥsāʾī at all...like...sāmja ‘silly f.s.’...baṭra ‘annoying f.s.’... I mean from when did we start to talk like this?...this is basically not ʾiḥsāʾī...all these things appeared in 2007 with the Messenger...when we started to be acquainted with people from other areas using chatting...more in 2010 and ten with Twitter...we got acquainted and got to learn new words... I will use this dialect ...with anyone from any area and this is thing I am doing...I mean now the social media allowed me to have a lot of friendships with people from Ḥijāz from Riyadh from the south...from everywhere...I speak because I don’t see any of them leaving their dialect...the one from the south speaks like the south...the one from Ḥijāz speaks Ḥijāzī...also because its soft and sweet in the mouth...and I believe myself when I speak using my dialect...than speaking another one...where I loose my credibility...when I leave the -iṣ...I loose it.’

Quote 9 produced by a middle-aged Sunni female

“*il-kalimāt illi tuqlab fiha il-ča ila kāf...miṭil čalb ila kalb...ʾatwaqqaʿ ʾinn-ha bidāyat iṭ-ṭamānīnāt...liʾanna bidāyat in-nahḏa kānat fi is-Suʿūdiyya...u wagt iṭ-ṭaqāfa...faʾatwaqqaʿ ʾinn-ha dxalat maʿa iṭ-ṭaqāfa...wagt ir-*

riwāyāt...wi il-kutub wil-qirā'a...u xaḏḏha min il-luya il-ʿArabiyya il-fuṣḥa...bḥēθ ʿinn-hum istabdawalaw ʿaw istrajaʿaw il-kalimāt ʿila ʿaṣilha fi il-luya il-ʿArabiyya...u kaḏālik binnisba lil-qāf...miθil jider ṣārat gidir bilga...laʿanna hi ʿaṣl il-luya il-ʿArabiyya il-qidir...nafs iš-šayy rjaʿat laʿaṣl il-kalima fi il-luya il-ʿArabiyya...ṭabʿan iḥna ngūlha gidir muṣ qidir...laʿannhum hum irjaʿaw lil-kitāba...wi rjaʿaw yaktibūn...ʿaw šāfaw il-kalimāt nafisha...nafs il-luya il-ʿArabiyya qidir...bass ʿihum nuṭghum u lahjathum il-ʿāmiyya ma yigdirūn yigulūn qidir...laʿannhum yigulūn tigīs il-malābis...tāxiḏ gyasāt...ma zilina nistaxdim nafs in-nuṭig la il-ga...qalil jiddan illi bida al-ḥin fi wagna il-ḥāli yistaxdim il-qāf zayy il-luya il-ʿArabiyya...zayy ʿana baqīs ʿaw qiyāsāt...ṭabʿan ʿana ma gid simaʿt laḥadd il-ḥin ʿaḥad yigūl qidir...killina nigūl gidir.’’

“the words in which [č] is changed to [k]...like in *čalb* which turns into *kalb*...I suppose at the beginning of the eighties...because it is the beginning of the renaissance in Saudi Arabia....and the time of culture....so I guess it came with the emergence of culture...the time of novels...books and literacy....and they took it from the Arabic language...so that they replaced or returned the words to their origin in the Arabic language...and that applies also to the /q/...like *jider* ‘pot’ it became *gidir* with [g]...because *qidir* is in the original form of the Arabic language...the same applies to it as it is returned to the Arabic language...of course we say *gidir* ‘pot’ not *qidir*...because when they returned to writing...or when they started to write...or saw the same words...the form in the Arabic language *qidir*...but because of their pronunciation or their vernacular they cant say

qidir...because they say *tigīs il-malābis* ‘she tries on clothes’...*tāxið gyasāt* ‘she takes measurements’...we still use the same pronunciation [g]...you will rarely find any one in our time who uses [q] like in the Arabic language...like *’ana baqīs* ‘I will take measurement’ or *qiyāsāt* ‘measurements’...of course until now I have never heard anyone who would say *qidir* ‘pot’.”

Quote 10 produced by a young Sunni female

“*min ’awwal...’aðkir ’awwal yōm kint şyīra...yimkin θāni...θāliθ...kina ngūlha ’ādi bi-čča [-ič]...faj’a...ittifagna ’nna ihna ngūlha bil-kāf[-ik] ...’ana u banāt xālti...ihna bingūl bil-kāf.miš ħilu il-ča...la’nn illi yigūlūnha il-gidīmīn...ba’dēn ta’awwadna”*

“In the past...I remember before when I was a child...maybe the second...or the third grade [of primary school, i.e. in 1998/1999]...we used to say it with *ča [-ič]* normally...all of the sudden...we decided to use the *kāf[-ik]*... me and my cousins...we will use the *kāf[-ik]*...the *ča [-ič]* is not nice...because those who say it are old like...and then we got used to it.”

Quote 11 produced by a middle-aged Sunni female

“*’atwaqqa^c il-’aşwāt il-jidīda il-ga wil kāf...miθil kalb bidāl čalb jāt min ir-rijū^c...’aw raybat il-jīl il-jidī lil-rujū^c lamufradāt il-luyā il-’Arabiyya...bħēθ ’inn-ha ma tşir ma’xað ’ala il-lahja...’aw ixtilāf il-lahjāt ’aşān yimkin ba’ad şār fi infitāħ ’ala manāṭq θānya faşār yabūn in-nās iθ-θānīn yifhamūnhum...maθalan lamma ’arūħ il-Ĥijāz ’aw ’arūħ Najd fi ixtilāf fi il-lahjāt fa’atwaqqa^c ’aşān yifhamūn kalāmi u yişir kalāmi ’awðah...’ana*

ʾatkallam maʿhum bidāl ma ʾagūl čalb...ʾagūl kalb ʿašān yifhamūn nuṭgi...ʾatwaqqaʿ... šlōn-ik hāḍi lahja jidīda ʿalēna... ʾatwaqqaʿ yaʿni...yimkin laha xallīna ngūl xamiṣtaʿšar sana...daxalt ʿalēna liʿan šārat fi lahja muwaḥḥada...il-jīl il-jidīd yabi ywaḥḥid lahjita maʿ il-manāṭig iθ-θāya...ma yabyi yiṣīr šāḍḍ...haḍi min wijhat naḍari ṭabʿan...ʾana ʾaḥiss...hāḍa illi ʾana ʾašūfa...ʾinna in-nās ma yabyūn kalām qadīm...yabūn yitkallimūn kalām ḥadīθ bḥēθ ʾnna in-nās yifhamūna...ʾaw...il-ʾaḡlabiyya...hijjathum ʾinna il-kāf hāḍi ʾaqrab ʾila il-luya il-ʿArabiyya...ʾihi kāf il-muxāṭaba...ʾawwal šayy il-jāmʿāt muʾaxxaran...tara il-kill yadxil jāmʿa...gabl kam sina...ma kānaw il-banāt yadxilūn jāmʿāt...kanaw il-banāt yiwaggfūn ʿind sinn iθ-θanawi u xalāṣ...ʾaw yimkin ʿind mitwaṣṣiṭ...bass il-ḥīn ṣār muš maqbūl ʾinna il-waḥda txalliṣ θanawi u tagʿid fi il-bēt...lāzim tadxil jāmʿa...ṭayyib il-jāmʿāt...muš kill waḥda yijīha qubūl fi mikānha...fayixtalṭūn maʿ manāṭig θānya...is-sōšal mīdya...al-ḥīn fi is-sanawāt il-ʾaxīra...ʿindač...il-Yutyūb...yaʿni Twitar u yēra... il-lahja il-bēḍa hāḍi ʾaḡlabha mustamadd...min il-luya il-ʿarabayya il-fuṣḥa...il-lahja il-bēḍa fi naḍari ʾinna ʾasāsha u bidāyatha min ir-Ryāḍ...taḥḍīdan ir-Ryāḍ muš Najd...liʾanna kān mujtamaʿ ir-Ryāḍ...hi ʾawwal šayy il-ʿāšma...θāni šayy ʾaḡlabiyyat in-nās illi mawjūdīn fiha fi iθ-θamānīnāt...ḥālathum jiddan kwayyisa...ʾumara u wuzara...fakanaw yixtalṭūn...fi naḍari hāḍi bidāyat il-lahja il-bēḍa.”

“I guess the new sounds the [g] and [k]...like in *kalb* ‘dog’ instead of *čalb* came from going back...or from the desire of the new generation to go back to the words of the Arabic language...so that it does not became a flaw in the dialect...and the differences in dialects maybe because there is an openness

with other areas...so they want other people to understand them...for example if I go to Ḥijāz or I go to Riyadh there are differences in the dialects so I guess so that they can understand me and my speech becomes clearer...I speak to them instead of saying *čalb* ‘dog’...I say *kalb* so that they understand my pronunciation...I guess...*šlōn-ik* ‘how are you f.s.’ this is a new dialect to us...I guess...maybe it started fifteen years ago...it came to us because of the appearance of a unified dialect...the new generation want to unify their dialects with other areas...they don’t want to be odd...this is of course my own opinion...I feel...this is what I see...people don’t want old speech...they want modern speech so that others can understand them...or...the majority...their rationale is because the [k] is closer to standard Arabic...the [k] as used for addressing... first of all the universities lately...everyone now goes to university...years ago...girls did not get into college...they stop at secondary school...or maybe intermediate school...but now it is not acceptable for girls to finish secondary school and stay at home...she must go to University...and the universities...not everyone gets an admission in their place...so they mix with other regions...the social media...in the last couple of years...also...the YouTube...Twitter and others... this *lahja il-bēḏa* ‘koiné’ (lit. white dialect) is derived...from the Arabic language...In my opinion the *lahja il-bēḏa* ‘koiné’ (lit. white dialect) is based in Riyadh... Riyadh particularly and not Najd...because the community of Riyadh...first of all it’s the capital city...second of all during the eighties the majority of people in Riyadh...their conditions are really good...royalty and ministers...and they used to mix...in my opinion this is the beginning of the *lahja il-bēḏa* ‘koiné’ (lit. white dialect).”

Quote 12 produced by a middle-aged Sunni female

“*hi jāyya min ir-Ryāḏ...bass hi ʾašilha muš lahjathum...mā laha ʾašil il-lahja il-bēḏa...bass il-ḥin mawjūda fī ir-Ryāḏ...u kiθirīn yistaxdimūnha...il-jīl il-jidīd killa yistaxdim il-lahja il-bēḏa.*”

“it came from Riyadh...but its not originally their dialect...*il-lahja il-bēḏa* ‘koiné’ (lit. white dialect) does not have an origin...its now found in Riyadh...many use it...all of the new generation uses it...all of the new generation uses the *lahja il-bēḏa* ‘koiné’ (lit. white dialect).”

Quote 13 produced by a middle-aged Sunni female

“*binnisba lil-ik...ʾana ʾagūl yimkin il-ik jāyya min waṣṭ il-mamlaka...ʾatwaqqa^c yaʾni...waṣṭ il-mamlaka illi hi ir-Ryāḏ biqurāha u hijarha...il-ʾašwāt illi jāt minha illi hi il-ik...kēf-ik...ʾaxbār-ik...il-kāf wil-jīm...madri...yaʾni ʾaḥiss ʾinn-ha ʾašl il-luya il-ʾArabiyya...al-ḥimḍillā yaʾni rabbi radd lina rušdna...yaʾni ʾēiš čalb? iš yaʾni jidir?...ṭabʿan ʾakīd ʾinna ʾahl il-Ḥasa...kēf intabhaw lhāḏa il-xaṭa?...ʾaw kēf yaṣṣaraw hāḏi il-lahja...laʾannhum it-tašlaw b-ʾahl ir-Ryāḏ u taʾaθθaraw fīha...u ṭabʿan binnisba la-kalimat čalb lamma ḥawwalōha ʾila kalb...ʾi...ṣaḥīḥ...laʾann hāḏa ʾašl il-luya il-ʾArabiyya...liʾann hāḏi il-lahja hi lahjat ʾahl ir-Ryāḏ simiʿtha min ʾaqārbi...u fī il-musalsalāt is-Suʿūdiyya baʿad...miθl il-musalsal is-Suʿūdi iš-šahīr Ṭāš ma ṭāš...ṣaḥīḥ ʾahl is-sinna hum illi kθir taʾaθθaraw b-ʾahl ir-Ryāḏ u ḥāwalaw ʾinn-hum yiqalldūnhum...taqlīdhum luhum ṭabʿan ʾawwalan min bāb il-ʾiʿjāb bi-l-lahja...ʾinnumm muʿjabīn blahjat ʾahl ir-Ryāḏ faḥabbaw*”

'inn-hum yiqalldūnhum...θāni ḥāja yēr il-'i'jāb...ḥassaw 'innu lahjat 'ahl ir-Ryāḏ naw'an ma 'arqa min lahjatna ihna lahjat 'ahl il-Ḥasa...fā'ašān kiḏa...ya'ni ḥāwalaw 'inn-hum yiqalldūnhum...u fī sabab θāliθ ba'ad...in-nasab...ihna 'ahl is-sinna fī tanāsub kθīr ma' 'ahl ir-Ryāḏ fālamma tanāsibaw...ṭabī'ī 'nnhum yit'aθθarōn blahjat ba'aḏ...ṭab'an il-majri'iyya tu'tabar sabbab qawi.'''

‘as to the *-ik*...I think maybe the *-ik* came from the centre of Saudi Arabia...I guess...the centre of Saudi which is Riyadh with its villages and hamlets...the sounds which came from it which is the *-ik*...*'axbār-ik* ‘how are you f.s.’...the [k] and [j]...I don’t know...I mean I feel it represents the origin of the Arabic language...Thank God because he gave us back our senses...I mean what is *čalb* ‘dog’? what is *jidir* ‘pot’?...of course definitely the people of al-ʿAḥsāʾ...how did they recognise this mistake?...or how did they change this dialect?...because they had contact with people from Riyadh and got introduced to it...and of course as to the word *čalb* ‘dog’ when they changed it to *kalb*...yes of course...because it is the source of the Arabic language...because this dialect is the dialect of the people of Riyadh I heard it from my relatives...and in the Saudi TV series also...like the famous Saudi Series *Tāš ma ṭāš* ‘the name of a famous Saudi TV series’ (lit. did the soda explode when shaken or not)...true the Sunnis are the ones who were influenced by the people of Riyadh and tried to imitate them...their imitation of them is of course first because they admire the dialect of Riyadh and that is why they imitate it...second other than admiration...they felt that the dialect of Riyadh is somehow more prestigious than our dialect the dialect of al-

ʾAḥsā...because of this...I mean they tried to imitate them...and there is a third reason also...kinship ties...we the Sunnis have strong kinship ties with the people of Riyadh so when they got related...its normal that they got effected...of course religious orientation has a strong role.’

Quote 14 produced by a young Sunni female

‘‘ʾaʿtiqid ʾinna il-kāf jāyya min Najd...yimkin min ir-Ryāḏ ʾakḥar maʿa taṭawwur il-ʿilāqāt bēn il-mujtamaʿāt...u mujtamaʿ ir-Ryāḏ mujtamaʿ ʾarqa...fa ʾahl il-Ḥasa kānaw yisʿōn ʾinn-hum yiqalldūnhum...binnisba lil ka wil ga...yimkin il-ka mā jāt min ir-Ryāḏ bhadd ḏātha... yimkin maʿ ḏihūr wasāʾil it-tawāṣul...it-tilfīzyūn...bidāyat il-musalsalāt kānaw killaha tiṭlaʿ bil-kāf...u yitkallimōn bil-kāf...kān iṣ-ṣūra wil-ʾinṭibāʿ illi yaʿti ʿanha ʾinn-ha ʾihi il-ʾarqa...hi il-ʾafḏal min il-ič...u dāyman il-mujtamaʿ yihāwil yiqallid illi ʾarqa minna...fa-ʾatwaqqaʿ hāḏa is-sabab...w-ʾiḥtimāl jāyya min Jidda...ʾahal Jidda ʾiḏa tlāḥḏīn killuhum yitkallimōn bil-kāf...ʾiḏa rjiaʿti l-mujtamaʿ Najd...il-Giṣīm maḥalan...killa bil-ič wi is-sīn...muš bil-kāf... fa ḥatta ir-Ryāḏ nafisha ma ʾaʿrif ʾiḏa tuʿtabar madīna jidīda min wēn jāt hal-kāf?...ma ʾaʿrif’’

‘‘I think the [k] came from Najd...maybe more from Riyadh with the development of relations between the communities...The Riyadh community is more prestigious...and the people of al-ʾAḥsāʾ try to imitate them...maybe the [k] did not come from Riyadh per se...maybe with the appearance of communication means...the television...at the beginning all TV series used [k]...and they talk using [k]...the image and impression was that it is very prestigious...so I think this is the cause...and maybe it comes from Jeddah...

if you notice the people of Jeddah they use the [k]...if you go back within the society of Najd...Qasim for example....they all use *-iç* and *-is*...not with the [k]....so even in Riyadh itself I don't know if it is considered a new dialect then from where did the [k] come?... I don't know!"

Quote 15 produced by a middle-aged Sunni male

‘lahjat ’ahl ir-Ryāð...tilfizyōn u tawāsil...ya’ni it-tilfizyōn min nāhyat il-musalsalāt illi ’aylabha lahjat ’ahl ir-Ryāð...wi il-muðī’in kaðālik...Ṭāš ma ṭāš...’aw ’ayy ’ahad gābalta min il-jām’a min ’ahl ir-Ryāð.’

“the dialect of Riyadh...Television and contact...I mean regarding Television series which are mostly in the dialect of Riyadh... *Ṭāš ma ṭāš* ‘the name of a famous Saudi TV series’ (lit. did the soda explode when shaken or not) or any one I met at university from over there.”

Quote 16 produced by a young Sunni male

‘illi yigūl šaxbār-ik...u ’lūm-ik...tigharni ’ahiss ’inn-ha dala’ māla dā’i ya’ni...walāhib ya’ni...’ahiss ’inn-ha subḥān allā taşannu’...hāða illi ’ahiss ’inna...u ma ’ahiss ’inn-ha salisa ma’ il-lahja..fiha dala’...u fiha laknat ’ahl ir-Ryāð...’axbārik? [making fun of them]...’ahiss ’inn-ha ...malīha u xāysa ya’ni u šēna bnafst il-wagt.’

“those who say... *šaxbār-ik* ‘how are you f.s.’...and *’alūm-ik* ‘I blame you f.s.’...it teases me I feel its unnecessarily sissy...I feel like, glorify God, it’s a fake...this is what I feel like it is...and I don’t feel it goes smoothly with the dialect...and it has the dialect of Riyadh... *’axbār-ik* ‘how are you f.s.’?”

[making fun of them]...I feel it is absurd, hideous and horrible at the same time.”

Quote 17 produced by an adolescent Sunni male

“*iḥna fī al-Ḥasa... u waldīn fī al-Ḥasa u niftixir...hī dalaʿ walla šinhu?... illi yitkallam kiḏa blahja... niḏyāṭa...nittannaz ʿalēh...yaʿni yisawwi nafsa?...yaʿni ma yirjaʿ Paṣla!...ʿindina wāḥid min rabiʿna...[his name]...lā kallam jawwāl yisawwi nafsa riyāḏi kinna u hu ʿaṣla ēš?... ḥasāwi... yirjaʿ Paṣla u yamši mn il-bidāya maʿna.*”

“we are in al-ʿAḥsāʾ...we were born in al-ʿAḥsāʾ and we are proud of it...they are acting like a sissy or what?...who ever talks in this dialect...we pressure them...we make fun of them...they pretend?...they don’t go back to their origin!...we have one of our friends...[his name]...when he uses his mobile he pretends he is from Riyadh, but what is his origin?...from al-ʿAḥsāʾ!...he should return to his own origin right from the beginning with us.”

Quote 18 produced by an adolescent Shiite male

“*binnisba li ʿatkallam b-lahjiti yaʿni...kaʿinsān ʿišt fī il-Ḥasa...w-inwaladt fīha ma fīha ʿēb...lēš ʿayayyir lahjiti [the use of -iš]...ʿana ma ʿašūf fīha ʿēb...ʿašān ʿayayyirha...ʿuhum luhum lahjathum...u iḥna lina lahjatna.*”

“as to me I use my own dialect...I mean as a person who lived in al-ʿAḥsāʾ...and was born in al-ʿAḥsāʾ there is no shame in our dialect...why

would I change my dialect? [the use of *-is*] ...I don't see anything wrong with it...to change it...they have their own dialect...and we have our own."

Quote 19 produced by a young Shiite female

"'afaððil lahjat 'ahl il-Ħasa..li'anna hāða il-mikān illi 'āyšin fih."

"I like the dialect of al-'Aḥsā'...because this is the place where we live."

Quote 20 produced by an adolescent Shiite female

"mub kill šayy nitḡayyar... 'aḡtifið b-lahjiti...li'anna 'akīd lahjāthum ma raḡ 'agdar 'atqinha fi kill šayy...ḡatta law 'atqantha fi kalma kalmitēn...ma raḡ 'atqin kill šayy nafs illi yigulūn kiða... 'ašān ma 'a'arrið nafsī lil-'iḡrāj... 'afaððil 'inn-i 'abga nafs lahjatna il-mit'awwdīn 'alēha."

"we don't change everything...I preserve my own dialect...because surely I will not be able to perfectly use theirs in everything...even if I can use it for a word or two...I will not be able to use it perfectly like the way they do...so that I don't embarrass myself...I prefer to maintain my own dialect...the one I am used to."

Quote 21 produced by an adolescent Shiite female

"'ana min naḡyiti 'aḡbb 'aḡtifið blahjiti."

"in relation to me I like to keep my own dialect."

Quote 20 produced by a young Shiite male

“*’amma binnisba la kalimat kēf hāl-ik...ya’ni ’ana ’ašūfha min il-Ḥasa u min barra...nafṣ il-kalima ya’ni.*”

“as to the word *kēf hāl-ik* ‘how are you f.s.’ [the -ik]...I think it is from al-’Aḥsā’ as well as from outside...the same word I mean.”

Quote 21 produced by a young Shiite male

“*šaxbār-iš u šaxbār-ik haḏēlli illi yitkallimōnhim il-ḥasāwiyya...mumkin ’atqabbalha...ḥāliyyan ’aylab ’ahl il-Ḥasa yitkallimōn kiḏa...[k]...[g]...[-ik].*”

“*šaxbār-iš* ‘how are you f.s.’ and *šaxbār-ik* [both the -iš and -ik] are used by speakers of al-’Aḥsā’...I can accept it...currently most of the people of al-’Aḥsā’ talk like this...[k]...[g]...[-ik].”

Quote 22 produced by a young Shiite male

“*lā ṭab’an il-mutadāwal la ’ahl il-Ḥasa illi hi šaxbār-ik u šaxbār-iš.*”

“no of course what is common in al-’Aḥsā’ is the use of *šaxbār-ik* ‘how are you f.s.’ *šaxbār-iš* [both the -iš and -ik].”

Quote 23 produced by a middle-aged Sunni female

“*binnisba lil-ič...hi lahjat ’ahl is-sinna fi il-Ḥasa...hum illi yistaxdimūn il-ič...binnisba lil-iš...miṭil šlōn-iš...hāḏi lahjat iš-šī’a bil-’iḏāfa ’ila lahjat...’indina il-badu...qabīlat badu...fi il-Ḥasa sākna...il-Marri...fi-l-Ywēbba...nafṣ iš-šayy yistaxdimūn il-iš...il-iš wi-l-ič...binnisba lil-*

Ḥasa...hāḍi lahjāt il-Ḥasa il-ʿaṣliyya...ʿaṣlan...hāḍa ʿaṣil ʿahal il-Ḥasa...kalāmhum -iĉ u -iṣ...binnisba li ʿana...ʿašūf il-iĉ wil -iṣ ḥabta fi-l-Ḥasa...yaʿni ʿaḥiss ʿinn-ha ʿalāma barza fi kalām ʿahl il-Ḥasa...yaʿni naʿrif ʿinna iḥna ahl il-Ḥasa... yaʿni naʿrif ʿinnu iḥna ʿahl il-Ḥasa ʿan ṭarīg lahjatna bi-l-iĉ wi-l-iṣ.”

“in regards to the *-iĉ*...its the dialect of Sunnis in al-ʿAḥsāʿ...they are the ones who use *-iĉ*...as to the *-iṣ*...like in *šlōn-iṣ* ‘how are you f.s.’...this is the dialect of Shiites in addition to the dialect of...Bedouins...a Bedouin tribe...living in al-ʿAḥsāʿ...il-Marri...in al-ʿYwēbba...they use the same *-iṣ*...the *-iṣ* and *-iĉ*...in relation to al-ʿAḥsāʿ...this is the original dialect of al-ʿAḥsāʿ...originally...this is the origin of the people of al-ʿAḥsāʿ...they use *-iĉ* and *-iṣ*...as to me... I think the *-iĉ* and *-iṣ* are stable in al-ʿAḥsāʿ... I mean I feel it’s a prominent feature of the speech of al-ʿAḥsāʿ people...I mean we know its us the people of al-ʿAḥsāʿ...I mean we know its us the people of al-ʿAḥsāʿ through our dialectal use of *-iĉ* and *-iṣ*.”

Quote 24 produced by a young Sunni female

“ binnisba la ṣōt iṣ-šīn...yāliban ʿana ʿalāḥḍa mintišir ʿind iṣ-šyaʿa...ʿamma b-mujtamaʿna baqiyyat il-ʿawāʿil [of Sunnis]...il-iĉ ʿihya illi mintašra...fi il-mujtamaʿ illi nšūfa fi ʿahl il-Ḥasa...ʿana ʿašūfhum maʿa baʿaḍ mitwāzīn il-iĉ wil-šīn.”

“in relation to the [š] sound ...I mostly notice it to be common among Shiites...by contrast, among the rest of the families in our society

[Sunnis]...the *-iĉ* is the one more common...this is what we see in the society of al-ʿAḥsāʾ...I see them aligned together the *-iĉ* and [š].”

Quote 25 produced by a middle-aged Sunni female

“*bi-nnisba la-kāf il-muxāṭaba...ʿinna fi nās yigulūn šlōn-iĉ u fi nās yigulūn ...šlōn-iš...u fi nās yigulūn šlōn-ik...ʿana ʿatwaqqaʿ šlōn-iš wi šlōn-iĉ haḏēla qadīmīn...ṭabʿan iš-šyaʿa yistaxdimūn il-ša ʿakṯar min is-sinna...u māzālaw ʿila alʿān yistaxdimūn mufradāthum u kalimāthum il-qadīma...yimkin taqrīban nlāḥiḏ fi is-sanawāt iṯ-ṯalāṯ il-ʿaxīra...bidaw iš-šyaʿa yistaxdimūn maʿa is-sinna...li-muxāṭabat ʿahl is-sinna...yistaxdimūn il-kāf lil-muxāṭaba...bas...bēnhum u bēn baʿaḏ...il-mutaʿāraf ʿinna hum ʿakṯar istixdām lil-ša min is-sinna...iš-ša bimaʿna kalimat šlōn-iš...ma yigulūn šlōn-iĉ...yigulūn ša...wi is-sinna ʿakṯar ...u ṭabʿan ʿind is-sinna...il-ʿistixdām il-iĉ...zayy šlōn-iĉ...ʿaw šlōn-iš ʿind il-fiʿa il-kibīra...il-fiʿa il-ʿmuriyya al-mitwaṣṭa...il-ʿaylabiyya yistaxdimūn il-iĉ...šlōn-iĉ...fiʿat iš-šabāb ʿaylabhum...il-fiʿa il-kubra yistaxidmūn il-kāf fi il-muxāṭaba.”*

“in relation to the [k] for the addressee...there are people who say *šlōn-iĉ* ‘how are you f.s.’ and there are people who say *šlōn-iš*...and there are people who say *šlōn-ik*...I think *šlōn-iš* and *šlōn-iĉ*...these are old...of course Shiites use *-iš* more than Sunnis...and they are still using their own old words and expressions...perhaps we almost notice in the last three years ...they started to use with Sunnis...to address Sunnis...they use [k] for the addressee...however...in between themselves...its well known that they use [š] more than Sunnis...Shiites in the use of *šlōn-iš*...they don’t say *šlōn-*

ič...they use [š]...and the Sunnis are more...of course among Sunnis...the use is *-ič*...as in *šlōn-ič*...or *šlōn-iš* among elderly speakers....the middle-aged speakers....most of them use *-ič*...*šlōn-ič*...most of the younger speakers...the majority of them use *-ik* when addressing.”

Quote 26 produced by a young Sunni female

“*iš-šīn ’akθar ’ind iš-šī’a...wa is-sinna ’akθar ča...bass madri...il-jīl il-jidīd is-sinna zāyid ’indhūm iš-šīn ba’ad.*”

“the *-š* is more common among Shiites...and Sunnis use *-č* more...but I don’t know...the new generation of Sunnis also highly use *-š*.”

Quote 27 produced by an educated elderly male Sunni.

“*il-muta’allimīn yanṭigūn il-ḥurūf bdaraja afḏal...lāḥaḏt ’ana kill mā inxifaḏ mistawa ta’līm iš-šaxš tilgāh mā ya’rif yafšil bēn il-yēn w-il-qāf...alḥīn ḥatta...fī-ššalā ’alāḥiḏ ’inn-hum yigulūn qad yāmat iš-šalā...mā ygulūn qad qāmat iš-šalā...la’anna ’ājiz ’an it-tafrīg bēn il-yēn wil-qāf...kill mā irtifa’ ta’līm iš-šaxš gidar yifarrig bēn il-qāf wil-yēn...u kill mā šār ’āmmi ’aw ta’līma ’aqall lāḥaḏt il-xalṭ bēn il-yēn wil-qāf yikūn bdaraja ’a’la...il-xalṭ bēnhum yu’tabar ḏa’f luyawi...u ’adam quḏrita bi-’inna ya’rif mita tgāl il-qāf u mita tgāl il-yēn dalāla ’ala ’inna luyata laysat qawiyya... fī-il-luya il-’Arabiyya...lāzim yifarrig bēn il-yēn wil-qāf...xāšša ’inn-ha wāḏḥa fī-l-qur’ān il-karīm.*”

“Educated people know how to pronounce sounds better. I noticed that whenever a persons’ educational level is low, he becomes unable to distinguish between [ɣ] and [q]...now even... in prayer I notice they say *qad yāmat iṣ-ṣalā* ‘prayer has started’...they don’t say *qad qāmat iṣ-ṣalā*...because he is unable to differentiate between [ɣ] and [q]...the more educated a person is, the more he will be able to know the difference between [ɣ] and [q]...and the more he uses the slang or has less education, I noticed the mixing of [ɣ] and [q] becomes higher...mixing them together is considered a linguistic weakness...being unable to know when to say [q] and when to say [ɣ] is an indicator that his language is not strong...in the Arabic language... he must distinguish between [ɣ] and [q]...especially given that it is clear in the Quran.”

Quote 28 produced by a middle-aged Shiite female

“*’ana ’axliṭ bēn il-kāf wil-ča...lākin ’aḏhirhum [the [ɣ] and [q]]...maḡalan kalimat yina...ṭalla’tha la’anni ’a’rif maxārij il-ḡurūf...ḡimdillā...’agdar...ḡatta wi-inti taṭigīnha ’amayyiz inti yalaṭṭay aw mā yalaṭṭay.’*”

“I mix between the [k] and [č]...but I express them [the [ɣ] and [q]]...for instance the word *yina* ‘richness’...I demonstrated it because I know from where sounds are articulated...thank God...I can...even when you say it I can know if you made a mistake or not.”

Quote 29 produced by a young Sunni female

“ illi yitkallimūn yēn...qāf...hāđi muşība!...ma‘a ‘inna jātni fātra bilmitwaşşit bil-yałať kint ‘asawwīha...bass ya hayāti muş ‘an qaşd ‘aw şayy zayy kiđa...fātra başīta illi xarbať bil-yałať...kānat tlāhiđni [her sister]...‘ala tūl tara yałaťtay u kiđa.”

“those who articulate [y]...[q]...this is a disaster!...although I had a time in intermediate school when I did it by mistake...but dear me not on purpose or anything like that...just a short period when I mixed them by mistake...she used to notice me [her sister]...immediately you did a mistake and so on.”

Quote 30 produced by a non-educated elderly Sunni female

“ ‘aw mā tafriđ miθil ‘indi ‘ana...sā‘ ‘agūl bilqāf u sā‘ bilyēn.”

“or it does not make a difference, like with me for example...sometimes I use [q]...and sometimes I use [y].”

Appendix C. lexical items with alternation of variants in al-ʿAḥsāʾ corpus

Table C1 Lexical items with [k], [č], and [š] alternations in al-ʿAḥsāʾ corpus

<i>čalb ~ šalb</i>	‘dog’	<i>dīč ~ dīš</i>	‘cockeriel’
<i>birča ~ barša</i>	‘swimming pool’	<i>čān~ šān</i>	‘if’
<i>‘ilč ~ ‘ilš</i>	‘chewing gum’	<i>činn ~ šinn</i>	‘it looks like’
<i>čiða ~ šiða</i>	‘this way’		

Table C2 Lexical items with [k] and [č] alternations in al-ʿAḥsāʾ corpus

<i>birčat</i>	‘blessing’	<i>čammin</i>	‘some’
<i>čanāz</i>	‘date harvesting’	<i>ḥači</i>	‘talk’
<i>mišč</i>	‘musk’	<i>siččīn</i>	‘knife’
<i>lačma</i>	‘punch’	<i>čabid</i>	‘liver’
<i>ḍanča</i>	‘tightness’	<i>čibīr</i>	‘big or old’
<i>minčas</i>	‘meat cleaver’	<i>čīs</i>	‘bag’
<i>škīč</i>	‘streets or alleys’	<i>simča</i>	‘fish’
<i>dačča</i>	‘stairs near the door or side of the swimming pool to sit on’	<i>čāba</i>	‘a toy made of sheep ankles’
<i>bičir</i>	‘the oldest son or daughter, or an unmarried girl’	<i>čan‘ad</i>	‘type of fish’
<i>trāčīb</i>	‘ornamintation on <i>al-bišt</i> which is a traditional men gown’	<i>čiḍab</i>	‘he lied’
<i>ḥyāča</i>	‘sewing’	<i>biča</i>	‘he cried’
<i>čaff</i>	‘palm’	<i>tida‘ač</i>	‘he scrubbed’
<i>ḍičar</i>	‘male’	<i>čanaz</i>	‘he pressed dates’
<i>mačbūs</i> or <i>čabsa</i>	‘rice meal’	<i>čibas</i>	‘he made rice meal’
<i>čatif</i>	‘shoulder’	<i>čammal</i>	‘he finished’
<i>ḍičar</i>	‘male’	<i>čanaz</i>	‘he pressed dates’
<i>mačbūs</i> or <i>čabsa</i>	‘rice meal’	<i>čibas</i>	‘he made rice meal’

Table C2 Lexical items with [k] and [č] alternations in al-ʿAḥsāʾ corpus (continued)

<i>čatif</i>	‘shoulder’	<i>čammal</i>	‘he finished’
<i>milča</i>	‘marriage’	<i>taʿallač</i>	‘he chewed gum’
<i>ʿabča</i>	‘type of perfume’	<i>mallač</i>	‘he married’
<i>mifčāč</i>	‘opener’	<i>fačč</i>	‘he opened’
<i>čiθīr</i>	‘a lot’	<i>taḥačča</i>	‘he talked’
<i>ḥačīr</i>	‘jealous or conservative’	<i>čiwa</i>	‘he cauterised’
<i>warč</i>	‘hip’		

Table C3 Lexical items with [g] and [j] alternations in al-'Ahsā' corpus

<i>tīrīj</i>	'road or way'	<i>tīwāyij</i>	'fabric rolls'
<i>fīrīj</i>	'neighbourhood'	<i>Swēj</i>	'name of a market'
<i>ṣidīj</i>	'friend'	<i>sījān</i>	'legs'
<i>tawāfīj</i>	'luck'	<i>šarjiyya</i>	'eastern'
<i>rifīj</i>	'friend'	<i>ḥalj</i>	'throat'
<i>jibla</i>	'Makka direction'	<i>bāji</i>	'the rest'
<i>ḍīj</i>	'tightness'	<i>jilīb</i>	'well'
<i>ḥarīj</i>	'fire'	<i>jiddām</i>	'in front of'
<i>jidir</i>	'pot'	<i>mjābil</i>	'in front of'
<i>jibliyya</i>	'Makka direction or western'	<i>šijj</i>	'really'
<i>birīj</i>	'kettle'	<i>jassam</i>	'he spread'
<i>Jēr</i>	'the name of a port'	<i>yājif</i>	'he is standing'
<i>bāji</i>	'the rest'	<i>jā'id</i>	'he is sitting'
<i>'irj</i>	'vein'	<i>ballaj</i>	'he stared'
<i>rīj</i>	'spittle'	<i>istajbal</i>	'he faced Makkah or the west'
<i>'iḍij</i>	'date raceme'	<i>jid</i>	'before'

Table C4 Lexical items where (k) was never palatalised in al-ʿAḥsāʾ corpus

<i>sakrān</i>	‘drunk’	<i>karam/karīm</i>	‘generosity/ generous’
<i>kamira</i>	‘camera’	<i>ḥikma/ḥakīm</i>	‘wisdom/wise’
<i>kōt</i>	‘coat’	<i>ʾakil</i>	‘food’
<i>brēk</i>	‘break’	<i>nukta</i>	‘joke’
<i>kart</i>	‘card’	<i>katkūt</i>	‘chick’
<i>kahraba</i>	‘electricity’	<i>bukla</i>	‘hair band’
<i>kēram</i>	‘a game’	<i>kaʾāba</i>	‘sadness or depression’
<i>diktōr</i>	‘doctor’	<i>katma</i>	‘hot and stuffy’
<i>kūb</i>	‘cup’	<i>rakik</i>	‘inproficient speech or writing’
<i>mikān</i>	‘place’	<i>kubba</i>	‘name of a meal’
<i>ṣakk</i>	‘deed’	<i>kufta</i>	‘pounded meat’
<i>makruma</i>	‘royal grant’	<i>karama</i>	‘dignity or honoring of others’
<i>kanab</i>	‘sofa’	<i>kōma</i>	‘pile’
<i>kabbūs</i>	‘cap’	<i>kufu</i>	‘deserving’
<i>kwēḥa</i>	‘dark skinned’	<i>ṣakwa</i>	‘complaint’
<i>kūra</i>	‘ball’	<i>kās</i>	‘glass’
<i>kalāfa</i>	‘great cost’	<i>ṣakk</i>	‘he closed’
<i>kāfir</i>	‘disbeliever’	<i>sikar</i>	‘he got drunk or laughed hard’
<i>ḥikūma</i>	‘government’	<i>kal</i>	‘he ate’
<i>nikad</i>	‘upset’	<i>nakkat</i>	‘he joked’
<i>kaḥḥa</i>	‘cough’	<i>taḥakkam</i>	‘he controlled’
<i>zkām</i>	‘cold’	<i>kassar</i>	‘he broke’
<i>kasir</i>	‘break’	<i>nakkad</i>	‘he upseted’
<i>ʿankabūt</i>	‘spider’	<i>tiṣakka</i>	‘he complained’
<i>ḥakka</i>	‘itch’	<i>ḥakk</i>	‘he rubbed’

Table C4 Lexical items where (k) was never palatalised in al-ʿAḥsāʾ corpus (continued)

<i>rakʿa</i>	‘a bow or one part of prayer’	<i>kawwam</i>	‘he compiled’
<i>kammūn</i>	‘cumin’	<i>tiḏāka</i>	‘he made himself look smart’
<i>kišša</i>	‘uncombed and matted’	<i>kiḏam</i>	‘he suppressed his anger’
<i>ḏaki</i>	‘smart’	<i>karram</i>	‘he dignified’
<i>msakkar</i>	‘closed’	<i>sikan</i>	‘he lived in’
<i>karša</i>	‘large belly’	<i>sakkar</i>	‘he closed’
<i>zikā</i>	‘zakat’	<i>zakka</i>	‘he paid annual charity’
<i>ḥakam</i>	‘referee’	<i>akūd</i>	‘probably’
<i>kaslān</i>	‘lazy’		

Table C5 Lexical items where (g) was never palatalised in al-ʿAḥsāʾ corpus

<i>gimar</i>	‘moon’	<i>ṭagim</i>	‘kit or set’
<i>galam</i>	‘pen’	<i>sūg</i>	‘market’
<i>guffā</i>	‘frond basket’	<i>margūg</i>	‘type of food’
<i>gahwa</i>	‘coffee’	<i>garš</i>	‘coin’
<i>gaḥaṭ</i>	‘drought or lack of something’	<i>rizg</i>	‘sustenance’
<i>gišīr</i>	‘short’	<i>nagš</i>	‘deficiency’
<i>gōl</i>	‘something said, goal keeper, or goal kick’	<i>garābīʿ</i>	‘scrap’
<i>gabir</i>	‘grave’	<i>giʿūd</i>	‘adult camel’
<i>tagšīm</i>	‘eating seeds’	<i>garam</i>	‘he took a bite’
<i>garma</i>	‘bite of food’	<i>gazzar</i>	‘he spent time’
<i>tagzīr</i>	‘spending time’	<i>giṭaʿ</i>	‘he cut’
<i>giḏla</i>	‘a fringe’	<i>ʿaggal</i>	‘he convinced somebody to be rational’
<i>giṭaʿ</i>	‘an expression used to show dislike’	<i>ḥigal</i>	‘he became heavy or played hard to get’
<i>ʿagil</i>	‘brain’	<i>nigal</i>	‘he transferred’
<i>ḥigil</i>	‘weight or being hard to get’	<i>gara</i>	‘he read’
<i>ṣagīr</i>	‘hawk’	<i>siḡa</i>	‘irrigated’
<i>nagīl</i>	‘transference’	<i>šigal</i>	‘carried’
<i>lugma</i>	‘bite’	<i>digam</i>	‘he broke front teeth’
<i>bgara</i>	‘cow or stupid’	<i>ṭaggam</i>	‘he made into set’
<i>sagī</i>	‘irrigation’	<i>tigahwa</i>	‘he had coffe’

Table C5 Lexical items where (g) was never palatalised in al-ʿAḥsāʾ corpus (continued)

<i>garāda</i>	‘bad luck’ (lit. monkey like)	<i>rigad</i>	‘he slept’
<i>gadd</i>	‘amount, or the same age as’	<i>laggaṭ</i>	‘he picked up’
<i>gaṣ</i>	‘hunting’	<i>rāgid</i>	‘he is sleeping’
<i>sagf</i>	‘ceiling’	<i>gidar</i>	‘he was able’
<i>digīga</i>	‘a minute’	<i>dagg</i>	‘he knocked’
<i>wagt</i>	‘time’	<i>waggat</i>	‘he timed’
<i>gaṣṣāb</i>	‘butcher’	<i>gaʿad</i>	‘he sat’
<i>girfa</i>	‘cinnamon’	<i>gāʿid</i>	‘he is or he is sitting’
<i>garaf</i>	‘disgust’	<i>gaṣṣ</i>	‘he cut or lied’
<i>lgēmāt</i>	‘type of food’	<i>laḥag</i>	‘he followed’
<i>gūri</i>	‘cart’	<i>liga</i>	‘he found’
<i>maṣḡūg</i>	‘torn’	<i>galaʿ</i>	‘he extracted a tooth or teeth’
<i>mgatṭat</i>	‘thrown all over the place’	<i>gatt</i>	‘he threw’
<i>rags</i>	‘dancing’	<i>rigaṣ</i>	‘he danced’
<i>ragim</i>	‘number’	<i>gisa</i>	‘he became hard’
<i>xalag</i>	‘old clothes’	<i>sāg</i>	‘he drove’
<i>sawwāg</i>	‘driver’	<i>gām</i>	‘he was or he woke up’
<i>bawwāg</i>	‘thief’	<i>bāg</i>	‘stole’
<i>galb</i>	‘heart’	<i>gidaʿ</i>	‘he ate dates’
<i>ṭalāg</i>	‘divorce’	<i>ṭallag</i>	‘he divorced’
<i>mgaṣmal</i>	‘short clothes that are supposed to be longer’	<i>garraʿ</i>	‘he became or made someone bold’
<i>garṣa</i>	‘pinch’	<i>biga</i>	‘it was left’
<i>ʿāgil</i>	‘sane’	<i>wigaf</i>	‘he stood up’

Table C5 Lexical items where (g) was never palatalised in al-ʿAḥsāʾ corpus (continued)

<i>bāgi</i>	‘rest of something’	<i>wāgif</i>	‘he is standing’
<i>gūṭi</i>	‘tin’	<i>yarag</i>	‘he drowned’
<i>garāj</i>	‘garage’	<i>ṭagg</i>	‘he hit’
<i>marag</i>	‘vegetable soup’	<i>šinag</i>	‘he hanged someone’
<i>mnagga</i> ^ʿ	‘soaked’	<i>nagga</i> ^ʿ	‘he soaked’
<i>bagl</i>	‘kurrat’	<i>ištāg</i>	‘he missed’
<i>digīg</i>	‘flower’	<i>wahhag</i>	‘he put someone in a predicament’
<i>ṣangal</i>	‘chain’	<i>talaggaf</i>	‘he meddled’
<i>yliga</i>	‘annoyance’	<i>gaʿam</i>	‘he sipped’
<i>malgūf</i>	‘meddlesome’	<i>gaṣṣar</i>	‘he made shorter, made sound lower’
<i>mfallag</i>	‘type of food’	<i>gāl</i>	‘he said’
<i>wihga</i>	‘predicament’	<i>gassam</i>	‘he divided’
<i>azrag</i>	‘blue’	<i>gaššam</i>	‘he ate seed’
<i>mṭabbag</i>	‘type of food’	<i>gannad</i>	‘he improved his mood by drinking tea’
<i>ḥamag</i>	‘nervousness’	<i>taḥammag</i>	‘he got disgusted’
<i>yarag</i>	‘drowning’	<i>šagg</i>	‘to rip’
<i>mašnūg</i>	‘hanged’	<i>gala</i>	‘fried’
<i>rguba</i>	‘throat’	<i>garaṣ</i>	‘he pinched’
<i>dōšag</i>	‘mattress’	<i>nagga</i>	‘he picked’
<i>migla</i>	‘frying pan’	<i>gaššar</i>	‘he peeled’
<i>ṣafga</i>	‘a clap’	<i>ṣaffag</i>	‘he clapped’
<i>gar</i> ^{ʿa}	‘bold’	<i>gabil</i>	‘before’
<i>gaṭwa</i>	‘cat’	<i>ḥagg</i>	‘belongs to’
<i>gidū</i> ^ʿ	‘dates’	<i>ʿigub</i>	‘after’
<i>mgaṣṣaṣ</i>	‘cut’	<i>fōg</i>	‘above’
<i>mgaṭṭa</i> ^ʿ	‘cut’		

Table C6 Lexical items in which [q] occurred in al-ʿAḥsāʾ corpus

<i>qāḍi</i>	‘judge’	<i>qaṣd/qāṣid</i>	‘intention/ intended’
<i>qarār</i>	‘decision’	<i>ʾiqāma</i>	‘resedence or resedence permit’
<i>ʿaqd</i>	‘contract’	<i>baqari</i>	‘stupid’ (lit. cow)
<i>qanāʿa/miqtiniʿ</i>	‘belief or conviction’	<i>wāqiʿ</i>	‘reality’
<i>tawqīʿ</i>	‘signature’	<i>taqrīr</i>	‘report’
<i>tawaqquʿ</i>	‘expectation’	<i>qarār</i>	‘decision’
<i>qasam</i>	‘swear’	<i>mustaqbal</i>	‘future’
<i>qarḍ</i>	‘loan’	<i>issābiq/ sābiqa</i>	‘the one before or in the past/ unprecedented’
<i>qiṣṣa</i>	‘story’	<i>naqš</i>	‘engraving’
<i>tarqiya</i>	‘job promotion’	<i>taqrīban</i>	‘almost’
<i>qahar/maqhūr</i>	‘annoyance /being annoyed’	<i>manṭiqa</i>	‘area’
<i>ḥaqāfa/muḥaqqaf</i>	‘culture/ knowledgable or cultured’	<i>taqāʿud/ mitqāʿid</i>	‘retirement, retired’
<i>qisim</i>	‘division, or part’	<i>qaḍa</i>	‘he judged’
<i>qunūt</i>	‘prayer’	<i>qarrar</i>	‘he decided’
<i>qatīl/maqtūl</i>	‘murder/murdered’	<i>taʿāqad</i>	‘he made a contract with’
<i>qalīl/ aqall</i>	‘few/less than’	<i>aqnaʿ</i>	‘he convinced’
<i>taqdīr</i>	‘certificate or appreciation’	<i>waqqaʿ</i>	‘he signed’
<i>qabāḥa/qabiḥ</i>	‘ugliness/ugly’	<i>tiwaqqaʿ</i>	‘he expected’
<i>taqlīd/mqallad</i>	‘counterfeit/fake’	<i>aqsam</i>	‘he swore’
<i>muqārana</i>	‘comparison’	<i>iqtarad</i>	‘he took a loan’

Table C6 Lexical items in which [q] occurred in al-'Ahsā' corpus (continued)

<i>istiqbāl</i>	‘reception gathering’	or	<i>qaşş</i>	‘he told a story’
<i>muqabala</i>	‘interview’		<i>taraqqa</i>	‘he got promoted’
<i>muqāwala/ muqāwil</i>	‘construction/construction manager’		<i>qahar</i>	‘he annoyed’
<i>musābaqa</i>	‘competition’		<i>tiθaqqaf</i>	‘he became cultured’
<i>istiqrār/ mistiqirr</i>	‘stability/stable’		<i>qassam</i>	‘he divided’
<i>istiqlāliyya/ mistiqill</i>	‘independence/independent’		<i>qanat</i>	‘he prayed’
<i>qanā‘a/ qanū‘</i>	‘satisfaction/satisfied’		<i>qatal</i>	‘he killed’
<i>qidam/ qadīm</i>	‘antiquity/old’		<i>qallal</i>	‘he made less’
<i>qaḏāra/ qaḏir</i>	‘dirtiness/dirty’		<i>qaddar</i>	‘he estimated or appreciated’
<i>mistiqizz</i>	‘irritated’ (lit. to be poked)		<i>qabbah</i>	‘he made ugly’
<i>qamiş</i>	‘night gown or shirt’		<i>qallad</i>	‘he counterfeited’
<i>qarya</i>	‘village’		<i>qāran</i>	‘he compared’
<i>faqr/ faqir</i>	‘poverty/poor’		<i>istaqbal</i>	‘he received or hosted’
<i>qānūn</i>	‘law’		<i>qābal</i>	‘to meet’
<i>qarn</i>	‘century’		<i>qāwal</i>	‘he worked as a construction manager’
<i>qazam</i>	‘midget’		<i>tisābaq</i>	‘he competed’
<i>ḥadiqa</i>	‘garden’		<i>istaqarr</i>	‘he became stable’
<i>şadiq</i>	‘friend’		<i>istaqall</i>	‘he became independent’

Table C6 Lexical items in which [q] occurred in al-'Aḥsā' corpus (continued)

<i>baqqāla</i>	'grocery shop'	<i>qazz</i>	'he poked'
<i>qalam</i>	'pen'	<i>iqтана'</i>	'he became satisfied or convinced'
<i>qur'ān</i>	'Quran'	<i>istaqdam</i>	'it became old'
<i>ḥalqa</i>	'episode'	<i>istaqḍar</i>	'he thought something was dirty'
<i>fırqa</i>	'ceremony musicians'		

Table C7 Lexical items with [ɣ] and [q] alternations in al-ʿAḥsāʿ Arabic

<i>zqīra</i> or <i>sqīra</i>	‘small’	<i>ṣibiq</i>	‘paint’
<i>ṣaqqāla</i>	‘housemade’	<i>qarb</i>	‘west’
<i>qada</i>	‘lunch’	<i>juqrāfyā</i>	‘geography’
<i>qālyə</i>	‘expensive’	<i>ṣiyāqat</i>	‘formulating’
<i>qurfā</i>	‘room’	<i>muqāmarā</i>	‘adventures’
<i>qaraḏ</i>	‘stuff’	<i>fāriq</i>	‘empty’
<i>qaḏa</i>	‘bother or fatigue’	<i>ṣāqaha</i>	‘he formulated it’
<i>mašqūl</i>	‘busy’	<i>maqaṭ</i>	‘he stretched’
<i>taqayyurāt</i>	‘changes’	<i>taqayyar</i>	‘he changed’
<i>ḏaqaṭ</i>	‘pressure’	<i>ištaqal</i>	‘he worked’
<i>ṣiqil</i>	‘work or task’	<i>qaššaš</i>	‘he helped somebody cheat’
<i>qabāʿ</i>	‘stupidity’	<i>baqa</i>	‘he wanted’
<i>taqyīr</i>	‘change’	<i>qasal</i>	‘he washed’
<i>mašqal</i>	‘salon’	<i>istaqfār</i>	‘he asked for forgiveness from God’
<i>qassāla</i>	‘washing machine’	<i>qassal</i>	‘he washed’
<i>maqsila</i>	‘dry cleaner, or basin’	<i>qarag</i>	‘he drowned’
<i>ašqar</i>	‘smaller’	<i>ḏaqaṭ</i>	‘he pressed’
<i>qanam</i>	‘sheep’	<i>qalaṭ</i>	‘he made a mistake’
<i>qbār</i>	dust	<i>istaqna</i>	‘he got rich’
<i>munqaliq</i>	‘aloof and uninvolved’	<i>istaqrab</i>	‘he got amazed’
<i>farāq</i>	‘emptiness’	<i>taqadda</i>	‘he had lunch’

Table C7 Lexical items with [y] and [q] alternations in al-ʿAḥsāʾ Arabic (continued)

<i>ṣqīr</i>	‘small’	<i>baqa</i>	‘he wanted’
<i>Iṣṣwayyiq</i>	‘name of a family’ (lit. jeweller)	<i>iṣṭaqal</i>	‘he worked’
<i>qalaṭ</i>	‘wrong’	<i>ballaq</i>	‘he reported’
<i>mablaq</i>	‘amount of money’	<i>qaṭṭ</i>	‘he annoyed’
<i>qani</i>	‘rich’	<i>qāzalatni</i>	‘she flirted with me’
<i>qarīb</i>	‘strange’	<i>farrāq</i>	‘he emptied something’
<i>altaq</i>	‘has a lisp’	<i>qaṭṭā</i>	‘he covered it’
<i>aqwi</i>	‘deluded or doing wrong’	<i>ṣaqar</i>	‘he/it became smaller’
<i>muqlaq</i>	‘closed’	<i>taqayyar</i>	‘he changed’
<i>qidḍa</i>	‘gland’	<i>balaq</i>	‘he reached puberty’
<i>maqrib</i>	‘sunset’	<i>qayyar</i>	‘he changed something or somebody’
<i>inqilāq</i>	‘aloofness or uninvolvement’	<i>iqṭāḍ</i>	‘he got angry’
<i>qaybūba</i>	‘coma’	<i>qāb</i>	‘he was absent’
<i>qarība</i>	‘strange’	<i>qayyab</i>	‘he made somebody absent’
<i>luqa</i>	‘language’	<i>taqayyar</i>	‘he became changed’
<i>qābāt</i>	‘forests’	<i>qaṭṭa</i>	‘he covered’
<i>quṭwa</i>	‘women head scarf’	<i>aqḷaq</i>	‘he closed’
<i>qāz</i>	‘gas’	<i>taqaṭṭat</i>	‘she covered her face’

Table C7 Lexical items with [y] and [q] alternations in al-ʿAḥsāʾ Arabic (continued)

<i>tiqīttis</i>	‘submergence’	<i>mitqaṭṭīn</i>	‘they are covered’
<i>miqtāḏ</i>	‘angry’	<i>minqaṭṭ</i>	‘he is annoyed’
<i>šmāq</i>	‘men head scarf’	<i>mištiqil</i>	‘he has worked’
<i>mablaq</i>	‘amount of money’	<i>qāṭṭ</i>	‘he is asleep’
<i>qilāl</i>	‘yields of fruits and vegetables’	<i>qasīl</i>	‘he has washed’
<i>mutafarriqa</i>	‘unengaged or unoccupied’	<i>šāqil</i>	‘occupying my thought’
<i>qurba</i>	‘alienation’	<i>šaqqāl</i>	‘he is working’
<i>qašāwa</i>	‘blur or cover’	<i>qašib</i>	‘against his/her will’
<i>mušāqib</i>	‘naughty’	<i>aqlabiyya</i>	‘most’
<i>raqba</i>	‘desire’	<i>aqāni</i>	‘songs’
<i>mitqaṭya</i>	‘she is covered’	<i>qaṭṭāya</i>	‘head cover for women’
<i>qēr</i>	‘other or different from’	<i>raqm</i>	‘in spite of’
<i>laqāyat</i>	‘until’		