

The Sociolinguistic Correlates of Dialect Contact and Koineisation in Medini Arabic: Lenition and Resyllabification

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To my beloved late Mum,

Brother and

Grandmother

إهداء

لأمي، ليلي، اللتي لم أعرفها ولكني أفتقدها وأفتقد حنانها ودعمها في هذه الحياة المليئة بالمصاعب،

إلى أخويا بكر لأنه كتير وحشني ووحشتني مضارباتنا واحنا صغار وكمان لعبنا

إلى ستي مريم اللي كان لها فضل كبير في تربيتنا ور عايتنا أنا وبكر

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Abstract

This is a sociolinguistic investigation that focuses on variation and change in Medini Arabic (Saudi Arabia). Data in the form of sociolinguistic interviews were collected from 58 speakers, and analysed quantitatively within the framework of the quantitative variationist paradigm using Rbrul. The study investigates the correlation between two linguistic variables and the social variables of age, gender and community (urban and Bedouin).

The dialects under investigation originate from two different norms: 'Bedouin', in this study a sub-type of Najdi; and 'Sedentary', the traditional dialect of Medina (viz. Medini). The Bedouin group share the same origin and culture whilst the urban group come from different ethnic and cultural backgrounds.

The first linguistic variable is (dʒ), which has two realisations in both communities: a traditional affricate [dʒ] and an innovative fricative [ʒ]. The second linguistic variable is resyllabification, which is precipitated by syncope or epenthesis. The innovative variant for the urban group is syncope whereas for the Bedouin group it is epenthesis. Overall, the results indicate that both dialects are undergoing levelling of marked linguistic features and change in progress towards the adoption of koineised or supra-local forms.

In the case of (d3), the change towards the innovative form is led by the younger women in both communities. With respect to the resyllabification variable, the age group of adult (30-44) urban and Bedouin men take the lead in syncope and epenthesis, respectively. The interpretation of the results is twofold: (i) linguistic, where the results are interpreted within the principles of Optimality Theory and Moraic Theory; (ii) sociolinguistic, where the focus is on social structure, socio-political and socioeconomic change in the locality.

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Phonetic transcription

In this thesis, two systems for Arabic transcription were used: IPA and the conventions used in the Encyclopedia of Arabic Language and Linguistics (EALL). IPA is used throughout except in proper names. For the latter, I followed the conventions used in Arabic dialectology. Below is the list of symbols used in this thesis.

Consonants

Arabic grapheme	IPA	EALI	
i	2)	voiceless glottal stop hamza
Ļ	b	b	voiced bilabial stop $b\bar{a}$
ت	t	t	voiceless dento-alveolar stop $t\bar{a}$
ث	θ	t	voiceless interdental fricative $t\bar{a}$
٢	dz, z	ğ, ž	voiced post-alveolar fricative ğīm
ζ	ħ	ķ	voiceless pharyngeal fricative $h\bar{a}$
Ċ	X	x	voiceless velar fricative $x\bar{a}$
د	d	d	voiced dento-alveolar stop dāl
ć	ð	₫	voiced interdental fricative <u>d</u> āl
J	r	r	voiced alveolar trill $r\bar{a}$
j	Z	Z	voiced alveolar fricative $z\bar{a}y$
س	S	S	voiceless dental fricative sīn
ش	ſ	š	voiceless alveo-palatal fricative šīn
ص	S ^c	ş	voiceless velarised alveolar fricative sād
ض	d٢	ģ	voiced velarised dento-alveolar stop dād
ط	t ^ç	ţ	voiceless velarised dento-alveolar stop $t\bar{a}$
ظ	٥, و	ġ	voiced velarised interdental fricative <u>d</u> a'
٤	ç	c	voiced pharyngeal fricative 'ayn
Ė	¥	ġ	voiced uvular fricative gayn
ف	f	f	voiceless labio-dental fricative fā'

ق	q , g	q, g	voiceless uvular stop qāf
ك	k	k	voiceless velar stop kāf
J	1	1	voiced dental lateral <i>lām</i>
م	m	m	voiced bilabial nasal mīm
ن	n	n	voiced alveolar nasal nūn
٥	h	h	voiceless glottal fricative $h\bar{a}$
و	W	W	voiced labiovelar glide wāw
ي	j	У	voiced palatal glide $y\bar{a}$

Vowels

The symbols for the short vowels are the same in both IPA and EALL: /a, i, u/. The symbols for long vowels are as follows:

EALL
ā
ē
ī
ō
ū

Introduction

This sociolinguistic research aims at investigating language variation and change in the dialects spoken in Medina speech community where two varieties of Arabic: namely, the urban and Bedouin, are in constant contact. The research focuses on two phonological variables: the variable (d3) which can be realised as an affricate [d3] or as a fricative[3], and resyllabification as a result of syncope and epenthesis.

The thesis is organised into eight chapters. **Chapter 0** starts with an introduction of the structure of the research and presents the research questions and hypotheses.

Chapter 1 provides the historical and social background of the location for this study.

Chapter 2 gives a concise linguistic description of the urban and Bedouin Medini dialects under investigation. The descriptions are based on the data collected for this research.

Chapter 3 situates the research in a theoretical context from the perspective of koineisation as a distinctive outcome of dialect contact, which forms the basis of the subsequent data analysis chapters. It presents the theoretical framework of the koineisation processes: mixing, levelling, simplification, interdialect developments, reallocation and focusing. It also provides a background of case studies on koineisation in the West as well as in the Arabic-speaking world.

Chapter 4 addresses the methods of data collection and analysis, including descriptions of the independent and dependent variables, and the sample of speakers.

Chapter 5 is dedicated to the discussion and interpretation of the variation found in (dz).

Chapter 6 tackles variation and use in syllable structure, particularly, syncope and epenthesis in both communities.

Chapter 7 provides a summary of the results and conclusions.

0.1 Hypotheses and research questions of the present study

One of the causes of change is dialect contact and subsequent koineisation. The data of the present study will be approached from this perspective. Until the 1950s, Medina had been inhabited mainly by the sedentary groups from diverse backgrounds and origins. At some point and for a variety of reasons, various Bedouin groups settled inside the city. The type of immigration that affected Medina is different from the case of Milton Keynes as Medina was not a 'no-man's-land' (Kerswill and William 2005:1024)¹ but it was already populated with speakers of Medini of the urban variety. During my sociolinguistic interviews, I asked participants from both varieties to reflect on the interaction between the two cultural backgrounds including languages, customs, traditions, norms and lifestyles. Most of the Bedouin speakers recognised that their Bedouin heritage has been affected by this contact in many aspects.

Taking into account these powerful stimuli, two hypotheses can be formulated. Firstly, variation and change in the speech of the urban and Bedouin communities of Medina is affected by the linguistic norms of the most cosmopolitan city in the region of al-Ḥiǧāz, Jeddah. One of the principal reasons for this assumption is based on my own observations as a native of the city, and the results and research findings reported by Trudgill 2004; Kerswill

¹ Kerswill and William's (2005) study is about Milton Keynes in which contact is mainly between adult migrants and their children only.

1994; Kerswill and Williams 2000; Al-Wer 2007, inter alia. The second hypothesis is that the linguistic behaviour of the Bedouin speakers is strongly influenced by the behaviour of the urban community. The deduction here stems from the Bedouins' agreement of the urban influence and from the principles that the urbanisation of Bedouins affects the different aspects of their lives including their language behaviour. Cadora states

"For more than a millennium as a consequence of the gradual process of ruralisation and urbanisation of Bedouin tribes, which continue to be operative today, bedouinite dialects began to develop concomitant linguistic features similar to those of adjacent sedentary communities."

(Cadora 1992: 31)

Both of these hypotheses are based on the accommodation and koineisation processes and will be discussed in the data analysis chapters.

The research questions can be listed as follows:

- 1. Are the younger generation leading the change (if present) towards the use of the innovative forms?
- 2. Are the younger female speakers leading the change (if present) towards the new forms?
- 3. Are the speakers of the urban community ahead of the Bedouin speakers in implementing the change?
- 4. Do both communities follow a similar pattern of language variation and change?
- 5. Does phonetic context (e.g. preceding and following sound) play the largest role in the prediction of the variation?
- 6. Does the syllable context (e.g. number of syllables, syllable structure) have an influence on the realisation of the dependent variable?

- Does the position of the dependent variable in the syllable (e.g. onset vs. coda, affix vs. stem) affect variation?
- 8. How closely does the process of linguistic change that is occurring in Medina follow language universals and developments?
- 9. How do the developments in Medina relate to the linguistic developments in the Hiğāz region as a whole?

These hypotheses and research questions will be addressed in the course of the thesis, especially in Chapters 5 and 6.

Chapter 1

Historical and social background of Medina

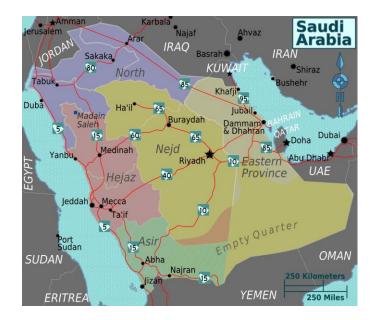
The objective of this chapter is to give an overview of the location, history and social backgrounds of Medina speech community. This chapter is relevant because it portrays the importance of this city not only because of its religious status but also because it is considered to be the first Islamic political entity. These historical developments led to the mixing of peoples from different origins and different dialectal backgrounds and, in some cases, to the mixing of different languages.

Section 1.1 gives information on Medina' s geographical location; section 1.2 summarises its history, and section 1.3 describes the social profile of the city.

1.1 Location of Medina

Medina is located in northern Arabia and it is one of the major cities that constitute the region of al-Ḥiǧāz in Saudi Arabia which also comprises Mecca, Jeddah, and Taif. It is located in the north west of al-Ḥiǧāz Province about 160 km from the Red Sea. The area of Medina is estimated at 153.216 square kilometres² and is bordered by Buraydah and Riyadh (Najd) to the east, and Ḥāʿil and Tabūk to the north and by the region of Mecca to the south. The location of Medina (spelt Medinah) can be seen in the following map.

² Edrees, Salih 2005:18



Map1.1: Map of Saudi Arabia, showing Medina and its borders³

Historically, the location of Medina is influential because it was a stopping place on the road of ancient trade caravans, linking the south of the Arabian Peninsula with the northern regions of the Levant and Turkey. Geographically, Medina was developed on an oasis and is situated in the midst of volcanic hills and lava flows to the east and west; however, watercourses flow from the south to the north resulting in the existence of valleys. The level of subterranean water in these valleys is relatively high so wells and springs are abundant, enabling the presence of fertile arable land, which is used in the cultivation of date palms, rose trees, a variety of fruits and green plants (The encyclopedia of Islam, 1986: 994). Since early times, these factors have had a direct impact on the settlement of this ancient city, where the inhabitants have enjoyed a prosperous lifestyle through commerce and farming distinct from the arid regions of the Arabian Peninsula.

Since the Prophet's migration to Medina from Mecca, this locale has become increasingly significant because it is the home of the Prophet's Mosque. Indeed, almost all

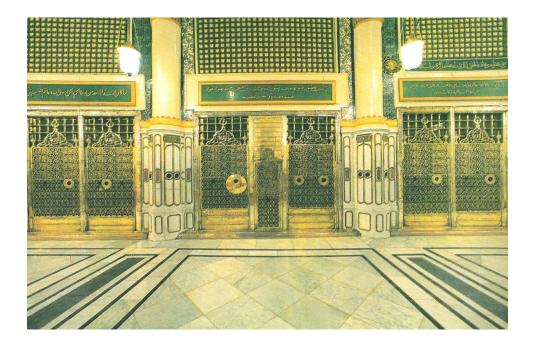
³ Source: http://www. mapsof.net/saudi-arabia/saudi-arabia-regions-map

Muslim pilgrims: Sunnis and Šīʻis, who come to Mecca to perform the Ḥaǧǧ 'pilgrimage', make a visit to Medina to pray in the Prophet's Mosque. On one side of the Mosque lies the Noble Room which houses the Prophet's grave where pilgrims like to pay their respects. The following pictures are of the Prophet's Mosque and of the Noble Room adapted from (Hamid, 2009: 22-23).

The Prophet's Mosque

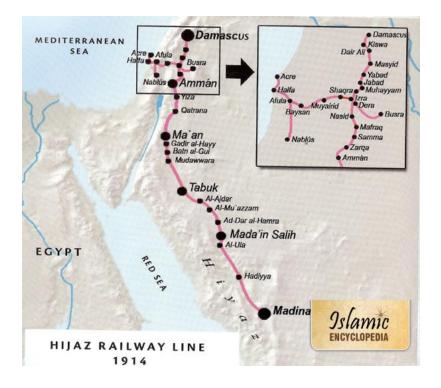


The Prophet's grave (The Noble Room)



There are other noted sites in Medina that were built due to its increasing reputation as the first Islamic city. Famously, the first ever mosque known as Qubā' Mosque was built by the Prophet and his companions who had migrated with him from Mecca. Here they openly prayed with a congregation for the first time in the history of Islam. Al-Mīqāt Mosque is renowned as the place where the residents of Medina and Muslims from bilād aš-Šām 'the Levant' have to pray to achieve a state of 'iḥrām 'a sacred state' before heading for Mecca to perform Ḥaǧǧ 'pilgrimage', which is still practised today, resulting of course in the contact of different dialectal and cultural backgrounds.

One of the prominent landmarks which was constructed during the second Ottoman era is the Hiğāz Railway, once used to connect Damascus with Medina passing through the other regions of the Levant, which was the only railway system in the Arabian Peninsula. Nowadays, this railway no longer exists so the station has become a museum, exhibiting the developments that the city has undergone throughout the previous different epochs. Importantly, Medina was recognised as a cultural centre and a gateway to knowledge and education, bringing a plethora of scholars, including teachers and students, initiating an exchange of knowledge, expertise, and of course language and dialect contact. Map 1.2 shows the route of the Hiğāz Railway.



Map1.2: Map of the route of the Hiğāz Railway⁴

All of these factors have contributed to the unique urbanisation and civilisation of Medina, making it distinct from other regions in northern Arabia, and that is why there has always been ample opportunity for interaction and contact between different cultural aspects, one of which is language.

1.2 A brief outline of the history of Medina

Medina before Islam

Timeline

 'Amāliqa
 Jews
 Arab tribes ('Aws+Xazrağ)

 Sometime before the arrival of the Arab tribes
 Around 5th Century AD

In pre-Islamic times, Medina was known as Yatrib, as stated by Glassé:

⁴ Source: http://islamicencyclopedia.org/public/index/topicDetail/id/12

"... the real Arabic name of the town was Yathrib, Jathrippa (this is the correct reading) in Ptolemy and Stephan Byzantinus, Jthrb in Minaean inscriptions."

(Glassé, 1987:83)

However, the descriptive word, Medina, from Aramaic, meaning literally an 'area of jurisdiction' and hence 'town', was the common name used to refer to this city after Islam (The encyclopedia of Islam 1986: 994 & Glassé 2008: 83).

There is no conclusive evidence regarding the first inhabitants of Medina, but according to a few sources it seems probable that the 'Amaliga were the first residents to settle there. Following the 'Amāliqa, there were waves of Jewish migration to Medina. The precise time of their settlements and their origins are unknown although historians associate their migration to Medina and Xaybar, with their exile from Syria and Palestine by the Romans. There are three main scenarios suggesting that these Jews must have been of Aramaean and Arabian descent who had converted to Judaism; firstly, their family names; secondly, the vocabulary they used in cultivation and thirdly, the substitution of the original Arabic name Yatrib for the Aramaic name, Medina (Hitti, 2002: 104). This Jewish community was predominately made up of three leading Jewish tribes: the Banu Qurayda, the Banu Nadīr and the Banu Qaynugā⁶. They were farmers who had control over the best date fields while others were merchants, craftsmen, armourers and goldsmiths. Later during the 5th century AD, two pagan Arab tribes, the Banū 'Aws and the Banū Xazrağ, originally from Yemen, came and settled in Medina. Socially, the Jewish community had the upper hand in the city while these two Arab tribes resided under their protection and custody. The Arabs, having Bedouin skills, were more used to the unsettled living conditions of the desert, relying on animal produce such as camel meat and leather, goats' milk, honey and eggs. In contrast, the Jews, considered sedentary, cultivated the land in Medina including the nearby oases. From that point onwards, the division between the Bedouin and sedentary communities was established. Linguistically, Medina speech community was a multilingual community in

which Aramaic, Arabic and Hebrew were spoken simultaneously (Hoyland 2001; Lewis 1993 and Khashoggi & Al-Nimer 1980).

Towards the end of the 5th century, circumstances deteriorated dramatically for the Jews; as a consequence, the Banū 'Aws and the Banū Xazrağ Arab tribes took over control of Medina. Conflicts and wars arose between and within the different communities resulting in the most serious war, Bu'āt, which occurred a few years before the Prophet's arrival from Mecca.

Medina after Hiğra 'migration' to the reign of 'Utmān

Timeline

		I	I.
Prophet's Hiğra 'migration'	'Abu Bakr	ʿUmar	ʿU <u>t</u> mān
(622 AD)	1 st Caliph (632-4)	2 nd Caliph (634-44) 3 ¹	rd Caliph (644-56)

In 622 AD Prophet Mohammed migrated from Mecca to Medina. Upon migration, the Prophet built his mosque and the nucleus of the Islamic community and civilisation was founded at that time. Since then, the Hiğra 'migration' has been recognised as the first year of the Muslim era and still is used as the official Islamic calendar in some Arab countries. From the period of the Prophet's governance to the era of the three Islamic caliphs: 'Abu Bakr aş-Şiddīq, 'Umar Ibn al-Xaṭṭāb, and 'Uṯmān Ibn 'Affān, who were successors to the Prophet respectively, Islam gained power and expanded to different areas in all directions, turning Medina into the first Islamic capital. From the Prophet's migration in 622 AD onwards, the city's social demography overwhelmingly changed in succession. Firstly, the arrival of Meccan Arab migrants accompanying the Prophet to Medina and their settlement in the city; secondly, the expulsion of the Jews from the city which took place over the course of the next ten years; thirdly, within a few decades and with the Islamic conquests, Medina witnessed waves of inward migration due to the settlement of the recent converts to Islam who arrived from all corners of the world and finally, a series of outward migration to the recently conquered areas.

Under those circumstances, not only did the Prophet and his first three successors expand Islam and establish the Arab Empire but also the new culture and civilisation of the Arab nation with Medina being its centrepiece. Thus, after the death of the Prophet and with the Islamic conquests over the course of many centuries, Arabic spread widely and became the main language of the new Empire that was spread over a large territory including Iraq, Syria, Egypt, Iran and North Africa. According to Versteegh,

"We do know that arabicisation was much more complete and possibly even progressed at a faster rate than the process of islamisation."

(Versteegh, 1997:93)

The period from the conquests onwards transformed Arabic. Indeed, it was the turning point at which the lines of demarcation between Old Arabic and New Arabic were defined. Old Arabic is the Arabic that was used in the pre-Islamic epoch, of which we have very little information. However, one claim that was agreed upon is that the elevated register of Old Arabic that was used in the writing of ancient Arabian poetry and later the Qur'ān during the reign of the third caliph, 'Utmān, resulted in the creation of Classical Arabic⁵ by the grammarians of the 8th century. New Arabic was the outcome of the conquests and it refers to the colloquial Arabic that emerged in the early stages of the conquest and from which the Arabic dialects were formed⁶. Since then 'diglossia', the sociolinguistic distinction between a

⁵ A register of Arabic different from ancient ordinary speech (Holes 2004).

⁶ Different theories have been formulated to trace the origin and evolution of these dialects; however, none of them provided a full explanation as we will see in §3.3

high (Classical Arabic) and low (dialect) variety, has become the norm in all Arabicspeaking countries (Versteegh 1997: 98).

From 'Aliy to the Mamālīk Caliphate

Timeline

'Aliy (4 th Caliph)) [°] Umayy	vad Abbassid	Fatimid	Ayyubiyyīn Mamālīk
(656-661)	(661-750)	(750-1258)	(909-1171)	(1174-1260) (1250-1517)
al-Kūfa	Damascus	Baghdad	Cairo	

After the assassination of the third Caliph, 'Utmān, in 656 AD, 'Aliy, the fourth Caliph and successor to the Prophet, was chosen to become the next caliph. However, because of political issues and internal turbulence within Medina, he decided to leave and relocated his headquarters to al-Kūfa, a military camp in Iraq. From that point in history, the centrality of Medina as the first political capital of the Islamic Empire diminished completely and since then it has never returned. According to Glassé,

"Madīna now sank, like its old rival Mecca, to the rank of a provincial town, unaffected by the current of the world's events."

(Glassé 1987:87)

In 661 AD 'Aliy was killed and his son, al-Ḥasan, ceded the caliphate to Muʿāwiya, the first 'Umayyad Caliph and the centre for the caliphate changed to Damascus. The following are the main features and events during the 'Umayyad Caliphate:

Muʿāwiya was a pioneer in introducing the hereditary system, from father to son, as the basic criterion in the selection of the caliph. When Muʿāwiya died, he was followed by his son, Yazīd. Al-Ḥusayn, the son of the fourth Caliph, ʿAliy, left Medina and arrived in Iraq to seek support in and around al-Kūfa to reclaim the caliph leadership. A war broke out between al-Ḥusayn's army and

that of Yazīd, in which al-Ḥusayn was killed at Karbala in Iraq in 680. His death strengthened the Šīʻi movement and its followers, who believed that 'Aliy and his sons should be the legitimate caliphs of the Islamic empire. Thus, began the division between Sunnis and Šīʻis.

- The Islamic empire resumed its expansion after having been interrupted by civil wars and Arabic became its official language.
- All of these factors reshaped the formation of a new population in Medina. Glassé states:

"... in this way Madīna gradually became the home of a new population, consisting of people who wished to enjoy undisturbed the great wealth which the wars of conquest had brought them."

(Glassé 1987:88)

- The expansion of the Prophet Mosque and the joining of the Prophet's rooms with the mosque in 707-710 AD and because of prosperity, the tradition of elaborate and expensive Islamic artefacts began to appear.
- Medina became an Islamic education centre and the creation of the Islamic Jurisprudence, set up by a group of lawyers, evolved.
- The 'Umayyad Caliphate was eventually brought to an end because of the struggle and conflicts between them and the Hāšimis 'Prophet's descendants; namely, 'Aliy, his sons, and grandsons' as they believed that the caliphate should be exclusively theirs.

In 750 AD Medina's governance was under the Abbasid Caliphate whose capital was in Baghdad in Iraq. During this Caliphate, the people of Medina experienced a peaceful life and the city continued to be an important site for education, attracting immigrants seeking knowledge from its scholars. Two major accomplishments were initiated during the Abbasids' reign: a new expansion of the Prophet's Mosque, and the establishment of the regular mail service between Medina and the other cities in al-Hiğāz. As different political movements emerged, the Abbasid Caliphate faced challenges and revolts, causing the creation of separate dynasties. Although some of them pledged allegiance to the Abbasids, those new kingdoms created their own capitals such as the Fatimids in Cairo, the Buwayhids in Šīrāz in Persia and the 'Umayyads in Cordoba in Spain to the extent that the Abbasid caliph had little or no political control, except for over his own capital, Baghdad. Because all the focus was on the new dynasties, Medina was left vulnerable with no support and the situation culminated in disorder involving crime, theft, and looting. When 'Adud Al-Dawla, one of the Buwayhids and an ally of the Abbasids, visited Medina on his pilgrimage to Mecca, the Medinis 'people from Medina' complained about the unruliness and subsequently, the first wall around the city with towers and gateways was built for protection in 974/975 AD (Munt 2012; Badr 1993).

In the decade of 990 AD Medina was under the control of the Fatimid Caliphate. The new city of Cairo was built and became the capital of this new Islamic caliphate. However, fluctuations of allegiance to the different caliphates as well as clashes between several political movements continued in Medina. Furthermore, there was widespread criminal activity, caused by a group of the 'a 'rāb 'bedouins', on travelling pilgrims and visitors reducing the safety and security of the pilgrimage route from the north of the Arabian Peninsula to Mecca and thus rendering it dangerous and impassable. There is no doubt that this would have had a devastatingly negative impact on the economic growth of Medina, its residents, and its prestige.

In the centuries that followed, another dynasty was established known as the 'Ayyūbids; it governed Egypt from 1169 to 1252, Syria to 1260, and part of Western Arabia to 1229 (Hourani, 2013: 84). This dynasty of the 'Ayyūbids was followed by al-Mamālīk State; Egypt was under its control for more than two centuries (from 1250 to 1517); Syria was seized from 1260 as well as the holy cities in western Arabia (Hourani, 2013: 85). Throughout the reign of the varying caliphates and states, Medina depended economically on charity and grants given by the rich in the Muslim world to its people. This money was spent in different ways: building protective walls around the city, constructing 'Arbita 'shelters for the poor', a practice that still exists today, and schools for the orphans, and maintaining and expanding the Prophet's Mosque.

Another significant donation was made by Sulțān Qalāwūn of al-Mamālīk State, which funded the construction of the dome above the Prophet's grave in 1280. It is known as the Green Dome⁷ and has become an important landmark in Medina, shown in the picture below.



As we have seen, Medina alternated its allegiance to the shifting caliphates; however, its ruling was mostly in the hands of al-'Ašrāf, 'descendants of the Prophet and 'Aliy's sons', who had semi-independent control over the city. Caliphs and sultans would only interfere in the internal affairs of the city if the emirs lacked governance expertise resulting in misrule, or whenever Medina faced threats from outside the city. All of these patterns reconfirmed the

⁷ Source: http://peacepropagation.com/wp-content/uploads/2009/06/green_dome.jpg

political and economic dependence of Medina on external resources (Wellhausen, 1927; Baidoun, 1983).

Medina under the Ottoman Empire and the Hašimites

Timeline

Ottomans (1 st period)	1 st Saudi State	Ottomans (2 nd period)	Hāšimites
(1516-17: 1804)	(1804: 1813)	(1813: 1916)	(1919: 1924)

As the Ottoman Empire, established and centralised in Istanbul in Turkey became more influential, Ottomans wanted to pursue their objectives in expanding their caliphate in all directions. Southwards, they were able to seize control of Egypt, Syria and Western Arabia including al-Ḥiǧāz in 1516-17. As we have seen during the changing caliphates, the ruling of the two holy cities: Mecca and Medina, was given locally to the family of al-'Ašrāf 'descendants of the Prophet'. After Egypt and Syria became under the control of the Ottoman Empire, the governor of Mecca, once the governor of the whole Ḥiǧāz, sent his son to offer the oath of allegiance to the Ottomans and thus this region was declared a province under the dominance of the Ottoman Caliphate.

The conquest of al-Hiğāz by the Ottomans brought a complete change for Medina; a change which brought about social, cultural and demographic outcomes rather than a political impact. Some of these changes benefited Medina but some did not. However, both had direct and long-term consequences on the city, some of which are listed below.

• The increase in financial resources given by the Ottoman sultans resulted in the prosperity of Medina.

- The increase in the number of pilgrims and visitors to Medina, when security and safety rules of the pilgrimage route had become tightened.
- The formation of a multicultural society since the city under the Ottoman Empire received pilgrims from different origins and cultural backgrounds, inter alia, Central Asia, Egypt, North Africa, and the Levant. Some of these pilgrims chose to reside in Medina permanently and succeeded in merging their traditions and customs with the locals and thus the immigrant-based community of Medina was formed.
- The spread of the Turkish culture and language, although Arabic remained the principal native language.
- Developments in education and the building of schools and libraries.
- The Ottoman-led construction of a new fortified wall with a castle as well as the establishment of a Turkish military base responsible for the defence of Medina.

In the course of time, Medina experienced periods of both stability and chaos. Many conflicts were recorded between the Harb Bedouin tribes living their nomadic lifestyles in the surrounding areas and the soldiers, mainly Turkish, who guarded the wall. In addition, the governors of Medina, al-'Ašrāf, experienced a twofold struggle. Firstly, feuds over power were accentuated between the governors of Mecca and Medina. Secondly, several high position jobs were created by the Ottomans, most importantly, the posts of Šaix al-Haram 'master of the Mosque', al-Qādi 'the judge', al-Mufti 'the religious judge' and the commander of the Castle. The majority of these positions were held by an Ottoman, appointed by the Ottoman authority in Istanbul diminishing the position of al-'Ašrāf.

All of these conditions led to the fact that radical changes in al-Ḥiǧāz were about to occur. It was at the beginning of the 19th century, that the first Saudi State was established in Najd including the eastern parts of the Arabian Peninsula. With the aim to conquer al-Ḥiǧāz, fierce battles between the Saudis and al-'Ašrāf 'governors of the two holy cities' raged. The Saudis, supported by some of the clans of the Ḥarb Bedouins, were able to besiege Medina and defeat al-'Ašrāf. In fact, in 1804 Medina was officially declared under the dominance of the first Saudi State and a leader of the Ḥarb Bedouin tribe was appointed as its governor.

This reign was not to last as Mohammed Ali, Ottoman ruler of Egypt, sent a large army headed by his sons who succeeded in the retaking of Medina and, consequently, was able to attack Najd and al-Dir'iyya and suppress the first Saudi State in 1817. Once more, Medina was under the authority of the Turks in 1813. The restoration of the second Ottoman era was characterised by a significant enlargement of the Prophet's Mosque, the plan of which is still used as the basis of all large mosques today. The second impressive achievement was the construction of the Hiğāz railway joining Medina with Damascus. The first train arrived in Medina on August 23 in 1908. On that occasion a very big festival was organised to celebrate this impressive accomplishment. In practical terms, the arrival of the train affected the lives of Medina residents in many ways. The construction and the running of the train service brought about a period of new prosperity for the city. The economy was booming and trade and businesses were flourishing. Medina became a market for Turkish merchandise as well as agricultural produce from the region of the Levant (Syria, Lebanon, Jordan and Palestine). There was also a huge increase in the number of pilgrims from the Maghreb, Syria, Egypt, Africa and Central Asia. The affluent life in Medina inspired and encouraged some of the Bedouin tribes, such as Harb, to settle there. More importantly, this Turkish development and modernisation triggered the separation of Medina from Mecca. This division was also manifested in the cultural aspects of Medina in that the Turkish and Levant civilisations,

cultures and even ethnicities exerted considerable influence over both the demography and the lives of Medini people. This close relationship with Istanbul made Medina distinct from Mecca, which is still observed today. For example, many urban families in Medina are of Turkish descent, some of whom are the families of Xāšogği, Țarabzūni and 'Izmirli, among others; however, in Mecca most of them are of Far Eastern descent such as Chinese and Indonesian. Culturally, in Medina public baths were very famous and were frequently used by its population whilst this Turkish /Syrian tradition does not exist in Mecca.

In 1914 the First World War began. The Ottoman Empire decided to side with Germany and Austria and entered the war against Britain and France. As we shall see, that decision cost the Ottomans their empire and dominance in Turkey and their other non-Turkish provinces including Medina. Sharīf⁸ Hussain was then the governor of al-Hiğāz appointed by the Ottomans. However, he was determined to establish an Arab kingdom independent of the Ottoman Empire which was a very attractive proposition to Britain, who offered assistance to the Sharif upon declaring war against the Ottomans. Sharif Hussain and his three sons: Abdallah, Faisal and Ali began planning for independence. Ali was based in Medina to secretly incite the inhabitants to throw political turmoil against the Ottomans. The Ottomans became suspicious and forced Medini people to migrate to Syria, Egypt, Iraq or Istanbul. This forced migration is known in history as Safarbarlik, during which Medina suffered devastating consequences. It was a political strategy by the Turks to empty the city of its inhabitants, to disperse members of the same family and to make it a garrison town for soldiers only. The Higāz railway was the means used for this collective deportation which destroyed the social structure of Medina. Trains would come from Damascus loaded with weapons and arms and on their way back they were heavily laden with expelled people. In 1916 a rebellion against the Ottomans broke out and Medina experienced one of the longest

⁸ Sharīf = Šarīf, a descendant of al-'Ašrāf family

sieges in its history that lasted for three years. The Hāšimis, who were based in al-Furayš, a village to the west of Medina and the hometown of the clan of al-Ruḥayli of the Ḥarb Bedouin tribe, were supported by Britain and some Bedouin tribes which ultimately led to the demise of the Ottoman Empire. The invasion of the allies: Britain, France, Russia and the USA in various Turkish cities and provinces paved the way for the total elimination of the Ottoman dominance in al-Ḥiǧāz (Badr 1993 & Hourani 2013).

The Hāšimis (Hashemites) took control of Medina in 1919 and Sharīf Ali was assigned to be governor by his father Sharīf Hussain, who proclaimed himself king of the whole area of al-Hiğāz. After periods of war, famine, and siege, life returned to its normal pace in Medina. The Hāšimis started to establish new administrative and political regulations. For instance, four centralised forces were established; namely, 1) the governance with Sharif Ali as governor, 2) Sharīf Šaḥḥāt as vice governor, 3) Sharīf Ahmad Ibn Mansūr as deputy, and 4) the military force comprising the police and the army. Thus Medina was governed and administered by al-'Ašrāf family from the Hāšimite tribe known to be descendants of the Prophet Mohammed. Since Higāz railway was destroyed and never used again, what was left of Medini infrastructure was repaired and new road systems were constructed. Education was promoted in the form of both public and private schools. Health and medical care improved and was made available to the residents of Medina as well as visiting pilgrims. However, this positive outlook was about to change again after only two years of stability. The family of al-Ašraf became competitive, each one fighting for more power and control and chaos prevailed. The role of the police and army diminished; therefore, public order was threatened by the increased rate of crime, assaults and thefts. Authorities could not keep order in Medina and people were forced to use their own means of self-defence (Badr 1993).

Meanwhile, the old rivals of the Hāšimite Kingdom were gaining power in Najd. Several factors caused the dispute between the Hāšimis and Abdul Aziz Ibn Abdulrahman Al-Saud, the founder of the third Saudi State and the Sultan of Najd, who later became the first king of Saudi Arabia. Hostilities stemmed firstly, from quarrels over the border of demarcation between Najd and al-Ḥiǧāz. Secondly, Sharīf Hussain prevented the Saudis and Najdis from performing pilgrimage, to which they reacted angrily and reported it to the Sultan of Najd. Lastly, Sharīf Hussain's gravest mistake was when he "in 1924 assumed the title of 'caliph of the Moslems'" (Hitti 2002:741), which was met with complete opposition from Abdul Aziz Ibn Abdulrahman Al-Saud.

Medina within the unified Kingdom of Saudi Arabia

Abdul Aziz Ibn Abdulrahman Al-Saud was aware of the weaknesses and discontent within the Hāšimite Kingdom among the people of al-Ḥiǧāz. In 1924 after the Ḥaǧǧ 'pilgrimage' season, Abdul Aziz made a preliminary attack on Taif. Sharīf Hussain ordered his son Ali to halt the advance of the Saudis on Mecca, but he was defeated and the Saudis seized Taif. In 1925 Sharīf Hussain's situation became hopeless to such an extent that al-'Ašrāf family 'the nobility of al-Ḥiǧāz' forced him to abdicate. Ali, Sharīf Hussain's son, was then proclaimed king of al-Ḥiǧāz while Sharīf Hussain renounced Jeddah to establish a new life in 'Aqaba in Transjordan. The Saudis captured Mecca soon after. Sharīf Ali, the new king, assisted by the Ḥiǧāzi nobility, tried to negotiate with the Saudis to stay in power. However, Abdul Aziz, the Sultan of Najd, completely refused any chance of reconciliation and insisted that Sharīf Ali leave al-Ḫiǧāz (Hourani 2013).

So began a new phase in the history of Medina, which came under siege by the Saudi troops headed by Saud, one of Abdul Aziz's sons. Sharīf Ali had already left Medina for Mecca; leaving Sharīf Šaḥḥāt and Sharīf Ahmad Ibn Mansūr to conduct the military operation against the Saudis in Medina. The inhabitants of Medina were suffering such great poverty and starvation that they were prepared to capitulate and become a member of the AlSaud State. The Sultan of Najd, Abdul Aziz, sent his son Mohammed to take over Medina from the Hāšimites. According to Vassiliev,

"On 6 December 1925 Mohammed entered Medina and prayed at the mosque of the Prophet. Imitating his father, he brought rice for the famished citizens and provided them with financial aid."

(Vassiliev, 2000: 264-265)

Thus, a new epoch started in Medina and Prince Mohammed Ibn Abdul Aziz became the first Saudi governor of this city. As a consequence, al-Hiğāz was considered a kingdom whose capital was Mecca and Medina was rendered the second holiest city. Abdul Aziz Ibn Abdulrahman Al-Saud was recognised as King of al-Hiğāz and Sultan of Najd, who was then acknowledged by other Islamic and Western states. After the conquest of al-Hiğāz, King Abdul Aziz Al-Saud had to create a new set of administrative measures different from those of Najd and al-Hasa in the east of Saudi Arabia because the people of al- Hiğāz were more educated and culturally advanced. He created Mağlis al-Šūra 'advisory council' comprised of representatives of al-'Ašrāf 'noble family' and merchants from Jeddah, a thriving port on the Red Sea. This council shaped the administrative boards of Hiğāz cities; namely, Mecca, Medina, Yanbu', and Taif. Prince Faisal, one of Abdul Aziz's sons, was appointed as viceroy of al-Hiğāz in 1926.

In short, during the reign of King Abdul Aziz Al-Saud and continuing through to the present Saudi era, all aspects of Medina, including social life, health care and education, have developed especially after the discovery of oil in 1938. No longer did Saudi Arabia have to rely on the income provided by the yearly pilgrimages to Mecca and Medina.

1.3 A social profile of Medina in the modern era

The defining dates and events in the history of Medina have been condensed in the previous pages to give an overall perspective of how dialect contact evolved. Over the course of time,

Medina has undergone dynamic changes. Its position has changed dramatically from just being an oasis comprising small and scattered settlements to becoming the first Islamic capital. It was the sole political Islamic capital from the time of the Prophet's arrival to the rule of 'Utmān, the third Caliph and successor to the Prophet. Nevertheless, since 'Aliy, the fourth Caliph and successor to the Prophet, shifted the capital from Medina to the military camp-city of al-Kūfa in Iraq, it has been deprived of any political significance and has been deeply affected by waves of outward migration. However, even today in the eyes of all Muslims, Medina is considered the rightful home of Islam, and pilgrims often travel to the Prophet's Mosque to pray. This greatly influenced the consecutive Islamic caliphates and countries because each new caliph, sultan or king believed that the development of Medina was their prized challenge and each of them wanted to leave a lasting impression on this holy city.

Despite facing political and economic difficulties, the population of Medina has never ceased to increase over the years. In 1926 AD the population was estimated at 50,000 with a dramatic growth to 609,318⁹ in 1992. In 2000 the population reached 856,000 and according to the census of 2011, Medina has a population of more than one million (Murshid 2011:7). At the beginning of the Saudi reign the increase was gradual, however, after the discovery of oil in 1938 the population rose dramatically. This was partly due to the massive rise of Bedouin urbanisation and settlement in the city and partly due to pilgrims who came from all over the world and decided to live there permanently either for economic or religious reasons.

The population of Medina can be divided into different social groups. In the criterion of religion, there are two sects; firstly, the Sunnis who are in the majority and of all social classes; secondly, the $\tilde{S}\bar{1}$ is, traditionally thought to be from Africa, Iraq and Iran. The largest

⁹ Source: http://www.cdsi.gov.sa/showproductstandard.aspx?lid=25&pid=556

 \tilde{S}_{1} i group are of a low social class known as Nax \bar{a} wla, whose name is attributed to naxla 'the date palm' which they have cultivated in and around Medina for centuries. In addition, there is an upper class of \tilde{S}_{1} is working in trade and commerce as merchants running their own businesses such as the family of al-Mašhadi. In terms of social groups, the city comprises Bedouin and urban communities who are made up of both sects (further discussion of this point is provided in Chapter 4).

Over a period of many years, walls surrounded Medina, with the Prophet's Mosque in the centre, to protect the urban inhabitants and pilgrims who were vulnerable to attacks from outsiders. Indeed, several of my interviewees in their seventies told me anecdotes about how the gates of the city were closed after 'Isha prayer, the last prayer of the evening, and opened at dawn. This urban community enjoyed a stable and prosperous lifestyle due to farming, commerce, trading and hospitality needed for the ever-growing pilgrimage industry. On the other side, the Bedouins lived outside the walls because of their nomadic or semi-nomadic way of life, but would enter the city to bring their produce to sell in the city's markets. With the onset of oil production in the 1940s, these walls were pulled down facilitating day-to-day interaction between the various communities in and around the city, predominantly Bedouins and urban people, and hence began dialect contact. The following picture¹⁰shows these encircling walls with the Prophet's Mosque in the centre.

¹⁰ Source: http://www.islamiclandmarks.com/wp-content/uploads/2016/05/Historical-City-of-Madinah.jpg



Economically, a number of jobs and industries of the past have disappeared mainly because of modernisation. For example, Medini people used to depend financially on the pilgrimage industry by turning their homes into boarding houses for a month or two during the pilgrimage season; today the situation is different as pilgrims stay at international hotels. In addition, the agricultural industry has diminished because of two reasons; firstly, land clearance for urban housing development replaced the arable land and secondly, the lack of water, which led to desertification. In fact, owning an 'Istirāḥa 'resthouse' is now a growing prestigious trend among wealthy families to escape the routine of city life during the weekends. Today, the majority of Medini people work in the public administrative sector and in government services like teachers and doctors to earn a living. Others own independent businesses, for instance, the families of al-Ḥaydary who own a date factory and al-Naḥhās who have pharmacies in and around the area of Medina.

Socially, in the past the urban and Bedouin communities were physically separated by the walls whereas today they are in constant contact, mainly in public spaces such as government offices, academic institutions and public services. However, over time, forms of more intimate social relationships have developed between the two social groups through informal social gatherings and the possibility of intermarriage. Neighbourhoods in Medina, like most cities, tend to have distinct areas where different groups have settled according to their social class, community and sect, though there is some overlapping of such social divisions. Map 1.3 shows the city with the Prophet Mosque in the centre represented by the green area.



Map 1.3: Map of Medina showing neighbourhoods¹¹

The closer the neighbourhoods are to the city centre (green area) the more likely they are to be integrated. This zone is well-known for being the centre of the pilgrimage industry where a lot of international hotels and businesses have been established to meet the needs of the pilgrims. As a

¹¹ Source: http://www.bindawood.com/pics/holycity/mdfull.jpg

result, it is considered as a melting pot of different cultural backgrounds including languages and dialects. On the other hand, districts on the outskirts of Medina are mostly inhabited by the Bedouin community, e.g. al-'Azīziyya, al-Di'ēta or al-'anābis (spelled AL ANABIS) found to the left of the map. Another area where there is a large Šī'i community is al-'ālya (spelled AL 'ALIYAH AREA). This spot is in the bottom right-hand corner of the map. The land there is used for the cultivation of date palms 'naxil', from which the noun naxāwla is derived to refer to that particular community, who are famed for their agricultural skills. To the north of Medina there is a large mountain called Ğabal 'Uhud 'Uhud Mountain' around which a sizeable majority of Bedouins from the clan of al-'Õfi of Banu Masrūh live.

Culturally, Medina has been shaped by the different backgrounds of its own population, migrant population and pilgrims. However, it is the urban community who have been the most affected by this cultural melting pot, having lived inside the walls with ample opportunity for direct communication with the pilgrims. Indeed, the aspects of life of the urban Medini population including their dialect, cuisine, funerals, weddings and religious festivals have been influenced according to the norms of the differing cultures. For example, when interviewing a 70-year-old urban woman about her wedding, she told me that she wore a typical Medini dress known as Šur'a (shown in the centre of the picture below)¹² whereas her daughter of the next generation chose to wear the white wedding dress with the bridal veil then known as *Turki*, originating from the Turkish tradition. Today, the bride can choose to wear both types of dresses during the wedding celebrations.

¹² Source: al-madina.com 22/02/2014



The Bedouin community are generally more conservative regarding their dialect, traditions and culture. However, after settlement within the city signs of change in their traditional ways of life have begun to appear. An interesting aspect of change that I recorded during my research is that some of my Bedouin interviewees disliked being referred to as 'Bedouin' while showing pride in their tribal affiliation.

Linguistically, two main distinct dialects coexist in Medina speech community: allahğa al-Badawiyya and al-lahğa al-Madīniyya (the Bedouin Medini and the urban Medini), respectively. As stated before, there was little contact between the two varieties until the walls were demolished. Today's circumstances allow regular interaction, with the potential for the development of some sort of Koiné, as will be explained in the course of this thesis.

Chapter 2

Linguistic description of the urban and Bedouin dialects of Medina

The dialects in the Arabian Peninsula can be classified into two types: western and eastern varieties. As seen before, Mecca and Medina are located in northern Hiğāz. Historically, their dialects have always belonged to the west-Arabian group, one of which is the Hiğāzi variety, identified as urban because it includes many foreign words such as *balās* 'saddlecloth' from Persian, and *firsik* 'peach' from Palestinian Jewish Aramaic (Rabin 1951:96). Therefore, since early times, the Hiğāzi urban dialect has been influenced by the surrounding countries and culture. Some scholars believed that the dialects of Mecca and Medina were identical; however, according to Rabin,

"...the difference between Mecca and Medina must have been considerable. Moreover both, having been seized by their inhabitants only shortly before Islam, must to some extent have been foreign bodies in their linguistic environment."

(Rabin 1951: 95)

Synchronically, as a native speaker of urban Medini dialect, I can confirm that although Meccan and Medini Arabic share similarities, they are quite distinct and there is a need for more research to locate these differences empirically.

Currently, Medina is inhabited predominantly by two communities: the urban community and the Bedouin community, each of which has its individual variety. The urban variety undoubtedly evolved from the west-Arabian dialects and is used by the urban community who come from diverse origins. On the other hand, the Bedouin community, made up of different tribes such as the tribe of Banū Ḥarb and of Banū Ğuhayna in Medina, use a number of Bedouin varieties. The Bedouin variety under investigation in this study is the one spoken by the clan of Banū Masrūḥ from the Ḥarb tribe who lived in al-Ḥinākiyya, a governate of Medina, approximately 100 km to the east. This area is known as the gateway to Najd and it connects the area of Medina to the region of al-Qaṣīm (Buraydah) and Hā'il (in the map Hayl). The Bedouin dialect of this tribe shares features of east-Arabian dialects such as the Najdi variety as well as west-Arabian dialects. Map^{13} 2.1 shows the dialects spoken in Saudi Arabia including the Hiğāzi (in the map, *Hijazi*) and Najdi dialects.



Map 2.1: Map showing the main dialects spoken in Saudi Arabia

In the following sections, I will give a descriptive account of certain salient features of the urban and Bedouin dialects spoken in Medina. Writing the description of urban Medini Arabic (UMA hereafter) was based on the data collected and was also facilitated by my native background. However, the Bedouin Medini Arabic (BMA hereafter) account was more challenging and had to be based on information elicited from my assistant who is a native speaker of this dialect, and on the data I collected. The descriptions below follow the models

¹³ Source: http://www.mghamdi.com/SaudiD.jpg

of dialect descriptions used in the Encyclopedia of Arabic Language and Linguistics. All of the examples provided are taken from the actual interviews I conducted.

A.2 Dialect description of the Bedouin Harb tribe variety

A.2.1 Phonology

A.2.1.1 Consonants

	*	Bila- bial	Labio- dental	Inter- dental		eolar * E	Post- alveolar	Pala- tal	Velar	Uvu- lar	Pha- ryngeal	glottal
Plosives or	+	b			d				g ¹			
Stops	-				t	t ^ç			k	q		3
nasal	+	m			n							
fricative	+			ð ð ^ç	Z		3^2		Y		ç	
	-		f	θ	s	s ^ç	ſ		Х		ħ	h
affricate	+						dз					
	-						ts					
Trill	+				r	r						
lateral	+				1	ł						
approximant	+	w				<u>.</u>		j				

Table 2.1: The consonant system of Bedouin Medini dialect

* + voiced /- voiceless

*P plain / *E emphatic

¹ Cairo dgi:m, g is mainly used as a reflex of q as in ga:l for qa:l 'he said', or in borrowed

words like siga:ra 'a cigarette'

² Damascus *dzi:m*, *z* exists as an allophone in Bedouin Medini Arabic

In BMA, the interdentals / θ , δ , δ^{c} / are all pronounced as in $\theta anawijjat$ 'high school', *ha:* δa 'this', and *basor'* some'. It is worth noting that / δ^{c} / is always used as a replacement for / d^{c} /as in *basor'* instead of *basd'* some'. This feature can be linked to the Najdi variety where the emphatic plosive / d^{c} / is replaced by the interdental / δ^{c} /. Regarding the interdentals, Ingham states:

"... the dialects of the Hijazi countryside are known to have interdentals corresponding to Classical \underline{t} and \underline{d} ."

(Ingham 1971: 274)

This is one of the most important features that distinguish the Bedouin variety from the urban variety. In UMA the interdentals do not exist (they merged with the plosives or sibilants as we shall see later.

Standard Arabic /q/ is pronounced as /g/ as in *?intagalna* 'we moved to'; however, in loan words from Standard Arabic, /q/ is maintained, e.g. *Sala:qa* 'relationship'.

Another difference between Bedouin and urban Medini dialects is the existence of the emphatic sounds / $\frac{1}{n}$ and / $\frac{r}{r}$, e.g. *gabi* 'before' and *filya:ib* 'most likely', and for / $\frac{r}{a}$ as in *xaraʒna* 'we went out' and *?arba?a* 'four'. In the urban dialect, / $\frac{1}{a}$ and / $\frac{r}{a}$ re usually plain.

In BMA, the glottal stop /?/ can occur as a way to emphasize a word ending with a vowel, e.g. *wiha:ða?* 'and so on' and *kullaha?* 'all of it'.

The sound [ts] is used by the older Bedouin speakers as a reflex of /k/ as in *birtsa > birka* 'a pond'.

In this Bedouin dialect, $/d_2/$ has two variants: [d₃] and [₃]; this sound is one of the linguistic variables under investigation in this study.

A.2.1.2 Vowels

short vowels				long v	vowels			
i			u	i:				uː
					e:		0.	
	a	a				a:	a:	

Table 2.2: Vowels in BMA

The vowel phonemes in the dialect parallel the vowel system of Standard Arabic; i.e. three pairs: one is short while its counterpart is long (/i, i:/, /a, a:/, /u, u:/) plus two mid long vowels (/e:/ and /o:/). These mid long vowels are the realisations of the diphthongs /aj/ and /aw/ in Standard Arabic, e.g. *bajt* > *be:t* 'house', *lawn* > *lo:n* 'colour'. However, the diphthongs are sometimes retained as in *maws^cu:l* 'linked, connected' or *zajtu:n* 'olives. Word-final diphthongisation can also be heard as in *d3aw* 'they came', *raħaw* 'they went' or *bintij* 'my daughter'. In addition, there exists in BMA a pair of low centralised vowels /a, a:/ which occur in certain linguistic environments as in *il-ba:b* 'the door'.

A.2.1.3 Syllable structure

The same syllable structures pointed out by Jarrah (1993, 2013) discussed in § B.2.1.3 on the syllable structure of UMA, are present in BMA, which are the light CV, heavy CVC or CVV: and the superheavy CVVC or CVCC. Distinctive syllable structure templates, namely the Najdi resyllabification rule and the *gahawa* syndrome¹⁴, peculiar to Bedouin varieties were also found in BMA. I heard several instances of these structures in my data, e.g. *f3ara* 'tree', *h3ara* 'stone' or *x/iba* 'a piece of wood' for the former and for the latter e.g. *ghawa* 'coffee' or *nxala* 'a palm tree'.

¹⁴ Information on this syndrome is provided in § 6.7.2

Another salient feature in BMA, not allowed in UMA, is that superheavy syllables are not only confined to word final positions as in UMA but they can occur word initially and word medially, as in *Sind.hum* 'they have' and *dzi:.ra:n.na* 'our neighbours', respectively. There is variation in the use of this structure and it is investigated as a linguistic variable in this study.

A.2.2 Phonotactics

The definite article al- 'the' assimilates to the following coronal letters¹⁵ as in *bittaħdi:d* 'especially' or *as-Sabt* 'Saturday'. In BMA, the phoneme /dʒ/, particularly its variant [dʒ], behaves either like a coronal or non-coronal letter¹⁶ in that sometimes it assimilates to the definite article as in *adʒ-dʒamal* and sometimes it does not as in *al- dʒamal* 'the camel' respectively.

A.2.3 Morphology

A.2.3.1 Pronouns

A.2.3.1.1 Independent personal pronouns

BMA marks gender only in the 2nd and 3rd person singular. In BMA the 1st person singular, masculine and feminine are identical. There is no gender distinction in the plural, as shown in table 2.3.

¹⁵ The 14 coronal letters known as Sun letters in Arabic are :/s, l, ð, t, n, z, r, ð, d, θ , t, d^f, s^f, J/

¹⁶ The 14 non-coronal letters known as Moon letters are: /b, ?, h, j, w, m, k, q, f, S, y, ħ, x, dʒ and its variant ʒ/.

	1st	2nd	3rd
Sg. Masc.	?ana	?ant	huw
Sg. Fem.	?ana	?anti	hijj
Pl.	ħinna	?antum	humm

Table 2.3: Independent personal pronouns in BMA

A.2.3.1.2 Possessive/object suffixes

In BMA as in the urban, there are three ways to form the possessive/object pronouns

depending on the final sound of the word as illustrated in tables 2.4, 2.5, and 2.6.

	1st	2nd	3rd
Sg. Masc.	?abuː-j	?abuː-k	?abu:-h
Sg. Fem.	?abuː-j	?abuː-ki	?abuː-ha
Pl.	?abu:-na	?abuː-kum	?abu:-hum

Table 2.4: in words ending with a vowel -v as in *?abu* 'father'

	1st	2nd	3rd
Sg. Masc.	flu:s-i	flu:s-ak	flu:s-ih
Sg. Fem.	flu:s-i	flu:s-ik	flu:s-aha
Pl.	fluːs-ana	fluːs-ukum	fluːs-uhum

Table 2.5: in words ending with a long vowel and a consonant –v:c as in *flu:s* 'money'

	1st	2nd	3rd
Sg. Masc.	bint-i	bint-ak	bint-ih
Sg. Fem.	bint-i	bint-ik	bint-aha
Pl.	bint-ana	bint-ukum	bint-uhum

Table 2.6: in words ending with a vowel and two consonants -vcc as in *bint* 'girl'

A.2.3.1.3 Indirect object suffixes

Indirect object suffixes in BMA are shown in the three tables below:

	1st	2nd	3rd
Sg. Masc.	galo:-li	galoː-lak	galo:-lih
Sg. Fem.	galo:-li	galoː-lik	galoː-laha
Pl.	galo:-lana	galoː-lukum	galoː-lahum or
			galo:-luhum (masc.)
			galoː-lhin (fem.)

Table 2.7: after –v, e.g. *ga:lu* 'they said to ...'

	1st	2nd	3rd
Sg. Masc.	ga:1-li	ga:l-lak	gaːl-luh
Sg. Fem.	ga:1-li	gaːl-lik	gaːl-la-ha
Pl.	gaːl-la-na	gaːl-lukum	gaːl-lu-hum

Table 2.8: after a long vowel and consonant -v:c, e.g. ga:l 'he said to ...'

	1st	2nd	3rd
Sg. Masc.	gult-li	gult-lak	gult-lih
Sg. Fem.	gult-li	gult-lik	gult-laha
Pl.	gult-lana	gult-lukum	gult-luhum

Table 2.9: after – cc, e. g. gult 'you said to ...'

A.2.3.1.4 Demonstratives

The demonstrative can be placed either before or after the noun, see examples below.

ha:ða	l-walad	vs.	?il-walad	ha:ða
DEM.PROX.SG.M	DEF-boy		DEF-boy	DEM.PROX.SG.M
'this boy'			'this boy'	

It is worth noting that in BMA there is a difference between animate and inanimate plural nouns when referring to them in the distant proximity in that $ha\partial o:l:ik$ is used with animate nouns while $\partial i:k$ is used with inanimate nouns as in

haðo:l:ik	il-bana:t
DEM.DIST.PL	DEF-girls
'those girls'	
ði:k	il-bjuːt
DEM.DIST.PL	DEF-houses
'those houses'	

There is no gender distinction in the plural. Demonstratives are shown in table 2.10.

	close proximity	distant proximity
Sg. Masc.	ha:ða	haðaːk
Sg. Fem.	ha:ði	haðiːk
Pl.	haðo:l	haðo:l:ik/ði:k

Table 2.10: demonstrative pronouns in BMA

A.2.3.1.5 Relative pronouns

The relative pronouns Palli and Pilli 'who, that, which, whom' can be used invariably with

respect to number, gender, and animate and inanimate objects as in

il-?awla:d	Palli	sa:fart	ma§-hum
DEF-boys	REL	travel.PFV.1.SG	with-them

'the boys with whom I travelled'

is-sajja:ra ?alli sa:farna fi:-ha DEF-car.F.S REL travel.PFV.1PL in-it F 'the car in which we travelled'

or

il-ħaʒara ?illi nħut^{\varsigma} \varsigmaala ba\varsigmaað^{\varsigma} DEF-stone.F.S REL put.IPVF.1.PL on each other 'the stone that we put on each other'¹⁷.

A.2.3.1.6 Interrogative pronouns

The main interrogative pronouns are *mi:n* 'who', *?e:f* 'what', *we:n* 'where', *wifinhu/wiffu* 'what, *?e:f ða:?/?e:f ha:ðaf* 'what is this/what is that', *mita* 'when', *kamm/bkamm* 'how much/how many'. They can be used either in pre- or post- verbal position as in

mita	ruħt?	or	ruħt	mita?
when.Q	go.PFV.2.SG.M		go.pfv.2.sg.m	when.Q
'when did you	ı go?'			

A.2.4 Adverbs

Adverbs can be classified into four groups:

- Temporal adverbs: *?il-jo:m* 'today', *bukra* 'tomorrow', *?ams* 'yesterday', *gabil ?ams* or *gabl ?ams* 'the day before yesterday', *basde:n* 'later', *basad* 'after', *halħi:n* 'now', *sala t^su:l* 'always' and *lissas* 'not yet'
- Place adverbs: we:n 'where', min we:n 'from where', hna or hina 'here', hna:k or hina:k 'there'

¹⁷ A traditional game of stones played outdoors

- Manner adverbs: ke:f 'how'; bilħe:l and marra 'very' an urban loan mainly used by the younger generation
- 4) Number and mass adverbs: barð^su 'again' gadwe:f 'how much/many' as in gadwe:f t^su:la 'how long is it?', tagr:iban 'approximately', kamm 'how much', 'how many', ?ayłab 'most of' as in
 ?ayłab is^s-s^salawa:t
 ADV.most DEF-prayers
 'most of the prayers'

A.2.5 Particles

A.2.5.1 Article

Speakers of BMA use the definite articles: 2il- and 2al- 'the'; the latter mainly used by the younger generation. Both articles are used invariably in that they do not agree in gender or number with the noun they modify as in 2il-2awla:d 'the boys', 2il-bint 'the girl' or 2il-be:t 'the house'. In connected speech, the glottal stop 2 is usually deleted as in $ra:\hbar at 2al$ -be: $t > ra:\hbar.tal.be:t$ 'she went home'; here after the deletion of 2, the consonant /t/ of the preceding word $ra:\hbar at$ is resyllabilited as the onset of the following syllable since in Arabic onsetless syllables are not permitted.

A.2.5.2 Genitives

The genitive markers are $\hbar agg$ and li. They can be used invariably either before or after the noun as in

хиð	ħaggak	<i>il-kita:b¹⁸</i> or	хиð	il-kitaːb	ħaggak
take.IMP.SG.M	gen.2.sg.m	DEF-book	take.IMP.SG.M	DEF-book	GEN.2.SG.M

¹⁸ In some contexts, the first sentence xuð haggak il-kita:b can mean 'take the book for yourself/your own use'.

li:	haːða	l-be:t	or	haːða	l-be:t	li:
GEN.1.SG	DEM.PROX.SG.M	DEF-house		DEM.PROX.SG.M	DEF-house	GEN.1.SG
'this hous	e is mine'			'this house is mine	?	

Tables 2.11 and 2.12 show the distribution of the genitive marker *hagg* and *li*:

	1st		2nd		3rd	
	masculine entities	feminine entities	masculine entities	feminine entities	masculine entities	feminine entities
Sg. Masc.	ħaggi	ħaggiti	ħaggak	ħaggatk	ħaggih	ħaggitih
Sg. Fem.	ħaggi	ħaggati	ħaggik	ħaggatk	ħaggaha	ħaggatha
Pl.	ħaggana	ħaggatna	ħaggukum	ħaggatkum	ħagguhum	ħaggathum

Table 2.11: inflection of *hagg*

The genitive marker *li*: - is used without showing gender distinction between entities.

	1st	2nd	3rd
Sg. Masc.	li:	lak	li:h
Sg. Fem.	li:	liki	laha
Pl.	lina	lukum	luhum

Table 2.12: inflection of *li*:

A.2.5.3 Negation

The same negation particles used in UMA detailed in § B.2.5.3 are also employed in BMA.

However, in BMA the particle ma can be attached to fa:d to refer to regular past actions that

no longer exist as in

ma:	Sa:d	sirna	nʃuːfa-ha
NEG.	longer.ADV	be.MOD.PFV.1PL	see.IPFV.1PL-it.OBJ.F

'we no longer see her'

ma: ?*a*:*d fi:* ?*al-*?*a:b zama:n* NEG longer.ADV in DEF-games past.ADV

'games played in the past no longer exist'.

The particle *ma*: can also be attached to *baSad* 'yet' to refer to actions that have not happened until now as in

ma:	baSad	banoː-lana	mas3id
NEG	yet.ADV	build.pfv.3pl-obj.3pl	INDF-mosque

'they have not built us a mosque yet'.

A.2.5.4 Prepositions

Prepositions are always followed by nouns, e.g. bi 'with' as in

?il-ħaʒara ?illi nħut^st^s Sala baSað^s w- nað^srib bi l-ku:ra DEF-stone REL stack.IPFV.1PL on each other and-hit.IPFV.1PL with DEF-ball 'we stack the stones up and hit them with the ball'

min 'from' as in

min bda:jt al-Si:d

from INDF.start DEF-Eid

'from the start of Eid'

min sometimes becomes syncopated as in *baSad ma: jatSa:n min al-Pixtiba:r > baSad ma: jataSa:n mnal-Pixtiba:r* 'after they leave the exam', or *gabil* 'before' which also sometimes becomes syncopated as in *gabil al-fana:dig matku:n maw3u:da > gabl al-fana:dig matku:n maw3u:da > gabl al-fana:dig matku:n maw3u:da 'before the hotels existed'. When prepositions are not followed by nouns, they are maw3u:da 'before the hotels existed'. When prepositions are not followed by nouns, they are maw3u:da 'before the hotels existed'.*

followed by pronouns, e.g. *be:n* 'between' as in *mumkin jiku:n be:n.hum* or *be:na.hum Sala:qa* 'there could be a relationship between them' or *maS* 'with' as in *sa:kni:n maS.hum* or *maSa:.hum* 'they live with them'; variation between the two forms in bold will be analysed in more detail in the chapter on the resyllabification variable.

A.2.5.5 Conjunctions

Conjunctions in BMA include coordinators and subordinators. Coordinators are:

- 1) w'and' as in nsajjid salal Pahil wal-zamassa 'we wish the family all the best'
- 2) Paw 'or' as in marra Paw marrite:n 'once or twice'
- *zajj* 'like' as in *ka:nat maθalan zajj il-ħaʒa:*³ 'it was like il-ħaʒa:³ (the name of the stone game)'
- 4) bass, la:kin 'but' as in jimkin il-yumme:ma bass haði:k ka:nat fatra 'it could be ilyumme:ma (a game) but it was a long time ago'

Subordinators are used to express:

1) time *joim* 'when' as in

joːm	?inna	s ^c ya:r	kunna	ı		s ^s aława:t	it-taraːwiːħ
when.ADV	we	young	be.PF	v.1pl		INDF-prayers	DEF-tara:wi:ħ
kaːnat		Salat ^s u:	l	fi	l-ħara	m	
be.PVF.3.SG.F		always		in	DEF-m	nosque	

'when we were young, the *it-tara:wi:h* prayers¹⁹ were always performed in the Prophet's Mosque'

¹⁹ Prayers during the month of Ramadan

2) conditional *law* 'if' as in

law gulti:li ka:n mumkin ?aʒi:b-lik waħda if.COND tell.PFV.2.SG.F be.MOD.PVF possible bring.IPVF.1SG-OBJ.2.SG.F one.F 'if you told me, I could have brought you one'

A.2.6 Nominal morphology

A.2.6.1 Gender

Nouns in BMA are classified as in other Arabic dialects into: animate nouns (masculine and feminine) and inanimate nouns (also masculine and feminine). Inanimate masculine nouns are unmarked as in *kita:b* 'book' whereas feminine nouns have the suffix - *ah* or - *a* as in *mazraʕah* 'farm'. However, there exist certain words without the feminine ending marker, e.g., parts of the body such as *Se:n* 'eye', *jadd* 'hand', or *riʒl* 'foot' which are feminine while *ra:s* 'head', *famm* 'mouth' or *wadʒh* 'face' are masculine. Many proper nouns like *in-Nixe:l* 'a village in al-Ḥinākiyya' or *ar-Rija:ð*^c 'the capital city of Saudi Arabia' are feminine.

Gender is shown through inflection of verbs, adjectives and pronouns, e.g.

Pantma:txa:fyou.2.SG.Mnot.NEGscare.IPFV.2.SG.M

'you do not get scared'.

In contrast, with feminine nouns, gender in the same sentence is shown through the use of the feminine pronoun *Panti* and through the inflections: - i: and the Bedouin feminine suffix - n attached to imperfect verbs as in

Panti ma: txa:f-i:n YOU.2.SG.F not.NEG scare.IPFV-2.SG.F 'you do not get scared'. In UMA the suffix -n does not exist.

A.2.6.2 Productive patterns

BMA shares productive patterns with UMA with the exception that, for certain objects, the first high back vowel /u/ of the urban pattern muCCaaC is substituted by the high front vowel /i/. Thus, the BMA pattern miCCaaC generates words like *misma:r* 'nail', *mifta:*ħ 'key' or *mirsa:m* 'pencil'. Patterns will be presented in detail in § B.2.6.2.

A.2.6.3 Dual

The dual is formed by adding the morpheme - e:n to a single noun, e.g. *mirsa:m* 'pencil' becomes *mirsa:me:n* 'two pencils'. In the feminine nouns ending in - *a* as in *madrasa* 'a school', the underlying feminine marker final - *t* reappears before the dual morpheme as in *madrast-e:n* 'two schools'. In BMA I noticed variation in the formation of this dual, e.g. *madraste:n* ~ *madrasate:n* in which the low front vowel /a/ is added (this will be discussed in more detail in the chapter on resyllabification).

A.2.6.4 Diminutives

In BMA diminutives are derived from adjectives as in $s^{c}yi:r$ or $s^{c}iyi:r$ 'small or little' becomes $s^{c}yajjir$ for males and $s^{c}yajjra$ for females or $\hbar abi:b$ 'a good person' becomes $\hbar bajjib$ for males and $\hbar bajjba$ for females; both are derived from the patterns $f_{s}ajjil$ and $f_{s}ajjla$ for males and females, respectively.

A.2.7 Numerals

The cardinal numbers are:

• *wa:ħid* masc., *waħdah* fem. 'one'; they can be used before or after the noun they modify as in *?indi wa:ħid ?axu* or *?indi ?axu wa:ħid* 'I have got one brother'

- *Piθne:n* masc., *θinte:n* fem. 'two'; they can be used with duals or plural nouns as in *walade:n Piθne:n* or *Pawla:d Piθne:n* 'two boys', respectively. What makes BMA different from UMA is that gender distinction is shown when using this cardinal number in BMA whilst gender is unmarked in UMA. To illustrate this point from data of the Bedouin group: *Sindi Pawla:d Piθne:n* 'I have got two boys' vs. *Sindi binte:n θinte:n* 'I have got two daughters'
- The numerals 3-10 have only one form as they do not show gender distinction: θala:θ
 'three', Parbas' 'four', xams 'five, sitt 'six', sabs' 'seven', θama:n 'eight', tiss' 'nine',
 Safr 'ten'. In UMA the final low vowel /a/ is retained whereas in BMA it is elided.
- The numerals 11-19 are *?iħdasf* 'eleven', *?iθnasf* 'twelve', *θlat^st^sasf* 'thirteen',
 ?arbast^sasf 'fourteen', *xamast^sasf* 'fifteen', *sit^st^sasf* 'sixteen', *sabst^sasf* 'seventeen',
 θmant^sasf 'eighteen', *tiss^{t^sasf*} 'nineteen'. When these numbers are attached to nouns,
 the suffix *ar* is added and they become longer as in *?iħdasfar jo:m* 'eleven days'.
- *Mijja* '100', *mite:n* '200', *θala:θmijja* '300' and so on. As for the ordinals, they are the same as in UMA and will be discussed in § B.2.7.

A.2.8 Strong verbs

A.2.8.1 Forms

Ι	Form I verbs follow the patterns: CaCaC, CiCiC and
rafas/jarfas 'raise'	CiCaC
rabat ^s /jarbut ^s 'tie'	All patterns have the prefix ja- in the imperfect form as in jarfa S 'to raise'.
ħarag/jaħrig 'burn'	The first difference between UMA and BMA is in the use
kitab/jaktub 'write'	of the prefix in the imperfect; the former uses ji- while the latter uses ja
∫irib/ja∫rab 'drink'	The second difference is in the final syllable of the
simis/jasmas 'hear/listen'	imperfect of some verbs; UMA uses /u/ as in jirsum or jixbuz whereas BMA uses /i/ as in jarsim or jaxbiz.

	This form includes verbs which are transitive in meaning and serves as the basis, from which the nine other forms are generated.
 II sarraħ/jisarriħ 'take the animals to graze' fattaħ/jifattiħ 'open up' ð^cajjag/jið^cajjig 'tighten' rattab/jirattib 'tidy up' III ra:salni/jira:silni 	Form II verbs are causative in meaning and can be derived from verbs, adjectives or nouns, e.g. sarraħ/jisarriħ is derived from the noun tasri:ħ 'to let go, to free' and rattab/jirattib is derived from the noun tarti:b 'tidiness' These forms in connected speech become syncopated as in jisarriħ al ɣanam > jisarrħ al ɣanam 'take the sheep out to graze' or nrattib aθ-θja:b > nrattb aθ-θja:b 'we arrange the clothes' (this variation will be analysed in Chapter 6) Form III verbs are usually used reciprocally by adding the appropriate suffixes as in ra:sal- ni 'he corresponded with me' in both the perfect and imperfect forms.
<pre>'correspond' s^sa:raħni /jis^sa:riħni 'open up' ga:bal /jiga:bil 'meet' sa:Sad/jisa:Sd 'help'</pre>	A few verbs are intransitive such as sa:far
IV ?aʕtˤa/jaʕtˤi 'give' ?aʒbar /jaʒbur 'force'	Form IV verbs have the prefix ?a- and are rare in the dialect, e.g. ?aʒbar /jaʒbur. Causation can also be delivered through the use of the word xalla: as in the perfect xalla: jamrað ^{ς} 'he made him ill' or the imperfect jxalli jamrað ^{ς} 'he is making him ill'.
V ?itSallam/jitSallam 'learn' ?itrattab/jitrattab 'was tidied up' ?it ^s xajjat ^s /jit ^s xajjat ^s 'was sewn'	Form V verbs are derived by adding the prefix ?it- or ?it ^c - to Form II verbs to express the reflexive meaning, e.g. Sallam 'teach' becomes ?itSallam 'learn', or the passive, e.g. xajjat ^c 'sew' becomes ?it ^c xajjat ^c 'it was sewn'.
VI ?itsa:rarna/nitsa:rar 'confide in each other'	Form VI verbs are formed by adding the prefix ?it- to Form III verbs. They express reciprocity or pretence. To form the imperfect of the plural verbs such as ?itsa:rarna, the prefix ni- is added as in nitsa:rar 'we are confiding in

?itme:rað ^ç /jitme:rað ^ç	each other'. Variation was attested in the use of these forms			
'pretend to be ill'	as in nitka:sal ~ nitika:sal.			
?itka:sal/jitka:sal				
'not to be bothered'				
VII	Form VII verbs are made passive by adding the prefix ?in-			
?inkatab 'be written'	to any transitive pattern I verbs. For instance, the active verb katab 'write' becomes passive ?inkatab 'be written'.			
?int ^s abax 'be cooked'	In some cases, the it- prefix which is the UMA default one was used by some Bedouin speakers as in $\frac{1}{3}$ and $\frac{1}{3}$.			
?insactz[3]an/jinsactz[3]in	Pinsad $z(z)$ an 'was sent to prison'.			
'be sent to prison'				
VIII	Form VIII verbs are derived by adding the infix -t- to			
?ixtabar/jixtabir	Form I verbs after the first radical letter or sound. In the verb harag 'burn', the radicals are h, r, g and the infix -t-			
'be examined'	inserted after h to generate the form ?ihtarag 'was burnt'.			
?iħtafað ^ç /jiħtafið ^ç	These verbs can be both reflexive and passive in meaning.			
'be kept safe'				
?iytasal/jiytasil				
'wash oneself'				
IX	Pattern IX is not productive and has been replaced by verbs of Form II as in from the adjective ?as ^c far 'yellow' the verb s ^c affar/ 'to become yellow' is derived.			
X	Form X verbs are formed by adding the prefix sta- or $st^{s}a$ -			
st ^s aSt ^s af /jast ^s aSt ^s if	to some verbs to mean to ask for something, e.g. the verb Sat ^s af 'to be kind to sb' becomes st ^s aSt ^s af.			
'beg sb to do sth'				
starzag/jastarzig				
'make money from small business transactions'				

Table 2.13: Forms of verbs: perfect/imperfect

A.2.8.2 Inflection of the verb

In BMA, verbs in the imperfect and perfect are inflected by different prefixes and suffixes to show person, gender and number. There is a gender distinction in the 2nd and 3rd person

singular and plural verbs. However, there are some instances of verbs in the perfect in which gender in the 3^{rd} person plural is neutralised as in $\hbar a f f a w/\hbar a f f an 'sythe', smiSaw/smiSn 'hear' or <math>\hbar rigaw/\hbar rigan$ 'burn'. In these examples both forms can be used with the 3^{rd} person plural feminine as we shall see later whereas forms with the suffix - aw are always used with masculine speakers. I can suggest that the trend in BMA is towards simplification, defined as "... an increase in morphological regularity, an increase in invariable word forms" (in Kerswill & William 2000:85). In UMA, gender distinction is not maintained in the plural.

A.2.8.2.1 Imperfect

Tables 2.14, 2.15, and 2.16 illustrate examples of imperfect verbs with the patterns CiCaC, CiCiC and CaCaC.

	1st	2nd	3rd
Sg. Masc.	?at ^s bux	t ^s at ^s bux	jat ^s bux
Sg. Fem.		t ^s at ^s buxi:n	t ^s at ^s bux
Pl.	nat ^s bux	t ^s at ^s buxu:n (masc.) t ^s at ^s buxin (fem.)	jat ^s bixu:n (masc.) jat ^s bixin (fem.)

Table 2.14: Inflection of the imperfect with the pattern CiCaC as in *t^sibax* 'cook'

	1st	2nd	3rd
Sg. Masc.	?asma\$	tasmaS	jasmaS
Sg. Fem.		tasmaSi:n	tasmaS
Pl.	nasmaS	tasmasu:n (masc.)	jasmasuːn (masc.)
		tasmasin (fem.)	jasmasin (fem.)

Table 2.15: Inflection of the imperfect with the pattern CiCiC as in *simiS* 'listen or hear'

	1st	2nd	3rd
Sg. Masc.	?aħrig	taħrig	jaħrig
Sg. Fem.		taħrigiːn	taħrig
Pl.	naħrig	taħriguːn (masc.)	jaħriguːn (masc.)
		taħrigin (fem.)	jaħrigin (fem.)

Table 2.16: Inflection of the imperfect with the pattern CaCaC as in *harag* 'burn'

A.2.8.2.2 Perfect

Tables 2.17, 2.18, and 2.19 show examples of perfect verbs with the patterns CiCaC, CiCiC and CaCaC:

	1st	2nd	3rd
Sg. Masc.	t ^s ibaxt ^s	t ^ç ibaxt ^ç	t ^s ibax
Sg. Fem.		t ^s baxt ^s i or t ^s ibaxt ^s i	t ^s baxat ^s
Pl.	t [¢] ibaxna	t ^ç ibaxt ^ç u (masc.) t ^ç ibaxtin (fem.)	t ^s baxaw (masc.) t ^s baxan (fem.)

Table 2.17: Inflection of the perfect with the pattern CiCaC as in $t^{c}ibax$ 'cook'

	1st	2nd	3rd
Sg. Masc.	simiSt	simiSt	sims
Sg. Fem.		simiSti	simSat
Pl.	simiSna	simiStu (masc.) simiStin (fem.)	smisaw (masc.) smisaw/smisn (fem.)

Table 2.18: Inflection of the perfect with the pattern CiCiC as *simis* 'listen or hear'

	1st	2nd	3rd
Sg. Masc.	ħaragt	ħaragt	ħarag
Sg. Fem.		ħaragti	ħrigat
Pl.	ħaragna	haragtu (masc.) haragtin (fem.)	hrigaw (masc.) hrigaw/hrigan (fem.)

Table 2.19: Inflection of the perfect with the pattern CaCaC as in *harag* 'burn'

A.2.8.3 Participles

To form the active and passive participles, two patterns can be used: CaaCiC and maCCuuC respectively as in *ba:jif* and *mabju:f*. They can both express the perfective, continuous or future aspect depending on the context, e.g.

?ana	ba:j\$	al-yanam
Ι	sell.PTCP.1.SG.M	DEF-sheep

'I am going to sell the sheep'

or

ha:ði	l-yanam	mabju:S-a
DEM.PROX.SG.F	DEF-sheep	sell.pass.ptcp-3.sg.f

'these sheep are sold'

To form the participle of the verbal forms, the prefix ja - of the imperfect is substituted by m(i) as in *hi mitxarrdzalmitxarridza mnal dza:msa* 'she is a university graduate'; the variation in resyllabification between *mitxarrdza* ~ *mitxarridza* will be explained in Chapter 6.

A.2.9 Weak verbs

A.2.9.1 Geminate verbs

Geminate verbs in BMA as in UMA follow the pattern CaCC as in $\hbar a f$ 'to scythe', madd 'to stretch' and $\hbar a dz dz$ 'to go on a pilgrimage'. Tables 2.20 and 2.21 show the inflections of geminate verbs in the imperfect and perfect:

	1st	2nd	3rd
Sg. Masc.	?aħi∬	tiħi∬ or tħi∬	jħi∬
Sg. Fem.		tiħi∬i:n or tħi∬i:n	tħi∬
Pl.	niħi∬ or nħi∬	tħi∬uːn (masc.)	jħi∬uːn (masc.)
		tħi∬in (fem.)	tħi∬in (fem.)

Table 2.20: Inflection of the geminate verb in the imperfect

	1st	2nd	3rd
Sg. Masc.	ħa∬e:t	ħa∬e:t	ħa∬
Sg. Fem.		ħa∬e:ti	ħa∬at
Pl.	ħa∬e:na	ha∬e:tu (masc.) ha∬e:tin (fem.)	ha∬aw (masc.) ħa∬aw/ħa∬an (fem.)

Table 2.21: Inflection of the geminate verb in the perfect

A.2.9.2 Verbs I ?

These verbs are derived from the infinitives which begin with the glottal stop 2 as in 2akl 'to eat' or $2ax\delta$ 'to take'. They lose the initial glottal stop in all the forms in the imperfect except in the 1st person singular, masculine and feminine, and in the perfect as shown in table 2.22 and 2.23.

	1st	2nd	3rd
Sg. Masc.	?aːxið	taːxið	jaːxið
Sg. Fem.		taːxðiːn	taːxið
Pl.	naːxið	taːxðuːn (masc.) taːxðin (fem.)	jaːxðuːn (masc.) jaːxðin (fem.)

Table 2.22: Inflection of verbs I ? in the imperfect

	1st	2nd	3rd
Sg. Masc.	xaðt	xaðt	?axað
Sg. Fem.		xaðti	xaðat
Pl.	xaðna	xaðtu	xaðaw (masc.)
			?axaðan (fem.)

 Table 2.23: Inflection of verbs I ? in the perfect

The imperative is $xi\delta$ (masc.), $xi\delta i$ (fem.) and the active and passive participles are $2a:xi\delta$ and $ma2xu:\delta$ respectively. In BMA, the initial glottal stop 2 is deleted in most of the perfect forms; a distinguishing characteristic from UMA where initial 2 is always present as we shall see in § B.2.9.2.

A.2.9.3 Verbs I w

These verbs are dervived from the infinitives which begin with the semi vowel *w* as in *wagf* 'to stand up' or *wasd* 'to promise'. Their inflections in the imperfect and perfect are shown in tables 2.24 and 2.25.

	1st	2nd	3rd	
Sg. Masc.	?agif	tagif	jigif	
Sg. Fem.		tigfi:n	tigif	
Pl.	nigif	tigfu:n tigfin	jigfu:n (masc.) jigfin (fem.)	

Table 2.24: Inflection of verbs I w in the imperfect

	1st	2nd	3rd
Sg. Masc.	wgaft	wgaft	wugaf
Sg. Fem.		wgafti	wgifat
Pl.	wgafna	wgaftum (masc.) wgaftum/wgaftin(fem.)	wgufaw (masc.) wgifin (fem.)

Table 2.25: Inflection of verbs I w in the perfect

The imperative is *?igif* (masc.), *?igifi* (fem.) and the active and passive participles are *wa:gif* and *mawgu:f*.

A.2.9.4 Verbs II w/j

In these verbs, the second radical sound in the infinitives is either w or j as in fajl 'to carry'.

Their inflections in the imperfect and perfect are shown in tables 2.26 and 2.27.

	1st	2nd	3rd
Sg. Masc.	?aſi:1	tʃiːl	jʃi:l
Sg. Fem.		tʃilːin	tʃiːl
Pl.	nʃi:l	tʃīluːn (masc.) tʃīln (fem.)	j∫iluːn (masc.) j∫iln (fem.)
		giin (ronn)	jjim (rom)

Table 2.26: Inflection of verbs II w/j in the imperfect

	1st	2nd	3rd
Sg. Masc.	∫ilt	∫ilt	∫a:1
Sg. Fem.		∫ilti	∫a:lat
Pl.	∫ilna	∫iltu:n (masc.)	∫a:law (masc.)
		∫iltin (fem.)	∫aːlan (fem.)

Table 2.27: Inflection of verbs II w/j in the perfect

The imperative is *fi:l* (masc.), *fi:li* (fem.) and the active and passive participles are *fa:jil* and *mafju:l*.

A.2.9.5 Verbs III j

In these verbs, the third radical sound in the infinitives is the glide *j* as in *ramj* 'to throw'.

Their inflections are shown in tables 2.28 and 2.29 below.

	1st	2nd	3rd
Sg. Masc.	?armi	tarmi	jarmi
Sg. Fem.		tarmi:n	tarmi
Pl.	narmi	tarmuːn (masc.)	jarmu:n (masc.)
		tarmuːn/tarmin (fem	.) jarmin (fem.)

Table 2.28: Inflection of verbs III j in the imperfect

	1st	2nd	3rd
Sg. Masc.	rame:t	rame:t	rama
Sg. Fem.		rame:ti	ramat
Pl.	rameːna	rame:taw (masc.)	ramaw (masc.)
		rame:taw/rame:tin (fem.)	ramin (fem.)

Table 2.29: Inflection of verbs III j in the perfect

The imperative is *?irmi* (masc.), *?irmi* (fem.) and the active and passive participles are *ra:mi* and *marmi*.

From the tables above which show the conjugation of verbs, we can notice that there is gender distinction in BMA in the plural in the 2nd and 3rd person while it is neturalised in UMA. However, in some cases there are signs of simplification in that sometimes both the masculine and feminine forms can be used to refer to feminine nouns.

B.2 Dialect description of the urban variety

B.2.1 Phonology

B.2.1.1 Consonants

	*	Bila-	Labio-	Alveo	olar	Post-	Pala-	Velar	Uvu-	Pha-	
		bial	dental	*P	*E	alveolar	tal		lar	ryngeal	glottal
Plosives or	+	b		d	dç			g^1			
Stops	-			t	t ^ç			k	q		?
nasal	+	m		n							
fricative	+			Z	Z ^ç	3^2		Y		ç	
	-		f	S	s ^ç	ſ		Х		ħ	h
affricate	+					क्र					
trill	+			r	r						
lateral	+			1							
approximant	+	W			<u> </u>		j				

Table 2.30: The consonant system of urban Medini Arabic

* + voiced /- voiceless

*P plain / *E emphatic

¹Cairo dgi:m g is either used as a reflex of q as in ga:l for qa:l 'he said' or in borrowed words like siga:ra 'a cigarette'

²Damascus *dzi:m z* exists as an allophone in urban Medini Arabic

The urban Medini dialect is typified by the phonological merger of interdentals with stops. This change was reported by a number of linguists, one of whom is Schmidt (1974), who investigated this change in Cairene Arabic and described it as the Colloquialisation Rules. According to these rules, the interdentals merged with stops first and at a later stage with sibilants. Al-Wer (2004) also studied this change and classified Arabian dialects into two types: type I dialects and type II dialects. Type I dialects have undergone merger and thus lost the interdentals in favour of the stops in their grammars while type II dialects kept both categories distinct: the interdentals and stops. In the latter dialects, the plain interdentals / θ , δ / have their stops counterparts /t, d/ respectively; however, there is no counterpart to the emphatic interdental / δ [§]/. This explains the reason why type II dialects contain lexical sets with etymological / δ [§]/ and /d[§]/; what is attested here is a merger in favour of the emphatic interdental / δ [§]/.

Consequently, as was shown in § A.2.1.1 BMA is a type II dialect whereas UMA is a type I dialect. Based on al-Wer's (2004) account, this change (merger), which resulted in the non-use and the disappearance of the interdentals in UMA can be illustrated as follows:

$$/\theta/ + /t/ \rightarrow /t/$$
, e.g. [θ alla:d3a] \rightarrow [talla:d3a] 'refrigerator'

$$|\delta| + |d| \rightarrow |d|$$
, e.g. [δ ahab] \rightarrow [dahab] 'gold'

$$\langle \delta^{\varsigma} / + /d^{\varsigma} / \rightarrow /d^{\varsigma} /$$
, e.g. [δ^{ς} uhur] \rightarrow [d^{ς} uhur] 'midday'

The interdentals can also be merged with sibilants (/s, z, z^{c} /) in more formal words as in the following examples:

 $\theta/+/s/ \rightarrow s/$, e.g. [surajja] \rightarrow here is used as a female proper name but the same word also means 'chandelier' but is never used in the dialect

 $|\delta| + |z| \rightarrow |z|$, e.g. [biðu:r] \rightarrow [bizu:r] 'seeds'

 $|\delta^{\varsigma}| + |z^{\varsigma}| \rightarrow |z^{\varsigma}|$, e.g. $[\delta^{\varsigma}uru:f] \rightarrow [z^{\varsigma}uru:f]$ 'envelopes' or 'circumstances'

In UMA, there is variation in the use of dzi:m as it can be realised either as [dʒ] or [ʒ]; this will be explained in the chapter on the (dʒ) variable. This sound can also be realised as

[g] in loan words or as $[\int]$ like in *waff* 'face'; these occurrences do not reflect variation and thus were excluded from my set of data. The affricate /dʒ/ is the only complex segment in the consonant inventory of UMA; its voiceless affricate /tʃ/ does not exist.

A distinctive feature of UMA is the frequent use of the plain [r] instead of the emphatic variant [r] even in the vicinity of back sounds, e.g. $\hbar aram$ 'mosque' or *yurajba* 'a kind of cookie'; however, in the vicinity of emphatics, [r] is used as in $t^{c}ari:g$ 'road'.

B.2.1.2 Vowels

Short vowels are: /i, u, a, a/; long vowels are: /i:, e:, a:, o:, u:/. The short and long low centralised vowels /a/ and /a:/occur sometimes in specific linguistic environments as in *bamba* 'pink' or *?awla:d* 'children', respectively. In the vicinity of (dʒ), only the short and long low front vowels were found in my data. In UMA, the merit of short vowels is twofold. Firstly, they exist as the main part of a word, e.g. *daradʒ* 'stairs', or secondly, they can be used as anaptyctic vowels to avoid the occurrence of consonant clusters, a feature not well-favoured in the dialect, as in *da.raʒ.te:n* versus *da.ra.ʒa.te:n* 'two steps or two marks' (this will be detailed in Chapter 6).

Diphthongs are /aj/ and /aw/ as in *lajmu:n* 'lemon' and *mawgif* 'parking' are used in the urban variety, however, some diphthongs are replaced by long vowels as in *zajt* vs. *ze:t* 'oil' and s^cawt^c vs. $s^co:t^c$ 'sound'.

B.2.1.3 Syllable structure

Jarrah (1993, 2013) identified the following syllable structures in Medini Hiğāzi Arabic:

- 1. Light: CV as in *ra.gam* 'number'
- 2. Heavy: CVC as in *ra.gam* 'number' and CVV as in *ya:.jib* ' he is absent'

3. Superheavy: CVVC as in *ra.ga.me:n* 'two numbers' or CVCC as in *ra.samt* 'I drew'. The light syllables followed by the heavy ones are unmarked as they occur freely in word-initial, medial and final positions while the superheavy syllables are confined to word final position. These same syllable structures are found in my set of data of the urban speech. Moreover, Jarrah (ibid) explained that high vowels in unstressed light syllables are deleted if the outcome does not violate the templates of syllable structures found in Medini Hiğāzi Arabic. He also goes on to say that the source of initial consonant clusters and non-final superheavy syllables is syncope or high vowel deletion. One of the linguistic variables under investigation in this study is resyllabification triggered by the application of syncope as it will be analysed in Chapter 6.

B.2.2 Phonotactics

Voice assimilation is attested in UMA; the voiceless stop /t/ sometimes triggers the devoicing of /3/ into its voiceless counterpart /ʃ/ as in *mu3tama*? > *muftama*? 'society'; this is known as regressive assimilation. Articulatory assimilation is also manifested in a number of cases as in the preposition *3anb* 'near', /n/ changes into /m/ because /b/ triggers /m/ as both sounds are bilabial. The definite article /?al/ 'the' assimilates to the fricative /3/ sound as in *?a3-3abal* but shows variation when /?al/ is followed by /dʒ/ as in *?a1-dʒabal* ~ *?adʒ-dʒabal* 'the mountain'.

B.2.3 Morphology

B.2.3.1 Pronouns

B.2.3.1.1 Independent personal pronouns

UMA distinguishes between gender in the 2nd and 3rd person singular only, as shown in

table 2.31.

	1st	2nd	3rd
Sg. Masc.	?ana	?inta	huwwa
Sg. Fem.	?ana	?inti	hijja
Pl.	?iħna, niħna	?intu	humma

 Table 2.31: Independent personal pronouns

B.2.3.1.2 Possessive/object suffixes

There are three ways to form the possessive/object pronouns depending on the final structure

of the word; tables 2.32, 2.33, and 2.34 illustrate them:

	1st	2nd	3rd		
Sg. Masc.	?axu: -ja	?axu: -k	?axu: -h		
Sg. Fem.	?axu: -ja	?axu: -ki	?axu: -ha		
Pl.	?axu: -na	?axu: -kum	?axu: -hum		

Table 2.32: in words ending with a vowel -v as in *Paxu* 'brother'

	1st	2nd	3rd
Sg. Masc.	filu:s-i or flu:s-i	filu:s-ak or flu:s-ak	filu:s-u or flu:s-u
Sg. Fem.	filu:s-i or flu:s-i	filu:s-ik or flu:s-ik	filu:s-aha or flu:sa- ha
Pl.	filu:sa-na or flu:sa- na	filu:s-akum or flu:sa-kum	filu:sa-hum or flu:sa- hum

Table 2.33: in words ending with a long vowel and a consonant –v:c as in *filu:s* or *flu:s* 'money'

In table 2.33, we can notice variation between *filu:s* or *fulu:s* mainly used by the old generation and *flu:s* used by the younger generation. This variation of syncope vis-à-vis epenthesis will be discussed further in Chapter 6 on the resyllabification variable.

	1st	2nd	3rd
Sg. Masc.	bint-i	bint-ak	bint-u
Sg. Fem.		bint-ik	bint-aha
Pl.	bint-ana	bint-akum	bint-ahum

Table 2.34: in words ending with a vowel and two consonants -vcc as in *bint* 'girl'

B.2.3.1.3 Indirect object suffixes

Indirect object suffixes in UMA are shown in tables 2.35, 2.36, and 2.37 below:

	1st	2nd	3rd
Sg. Masc.	galo:-li	galo:-lak	galo:-lu
Sg. Fem.	galo:-li	galo:-lik	galo:-la-ha or galo:l- ha
Pl.	galo:-la-na or galo:l- na	galo:-la-kum or galo:l-kum	galo:-la-hum or galo:l-hum

Table 2.35: after -v, e.g. ga:lu 'they said to ...'

In table 2.35, we see variation in the suffixes of 1^{st} , 2^{nd} and 3^{rd} plural as well as in the 3^{rd} singular feminine (this variation will be analysed in Chapter 6).

	1st	2nd	3rd
Sg. Masc.	gal-li	gal-lak	gal-lu
Sg. Fem.	gal-li	gal-lik	gal-la-ha
Pl.	gal-la-na	gal-la-kum	gal-la-hum

Table 2.36: after a long vowel and consonant -v:c, e.g. ga:l 'he said to ...'

Variation was not recorded here.

	1st	2nd	3rd
Sg. Masc.	gul-tal-li or gul-ta-li	gul-tal-lak or gul-ta- lak	gul-tal-lu or gul-ta- lu
Sg. Fem.	gul-tal-li or gul-ta-li	gul-tal-lik or gul-ta- lik	gul-tal-la-ha or gul-tall-ha
Pl.	gul-tal-la-na or gul-tall-na	gul-tal-la-kum or gul-tall-kum	gul-tal-la-hum or gul-tall-hum

Table 2.37: after – cc, e. g. gult 'you said to ...'

As we can see in table 2.37, there is variation in all cases. With respect to the 1st and 2nd singular masculine and feminine, and 3rd singular masculine, examples show that the number of syllables remains the same regardless of whether the suffix pronoun - l is geminated or not. A second scenario occurs in the 3rd singular feminine as well as 1st, 2nd and 3rd plural where the low front vowel /a/ is deleted. This deletion results in the reduction of syllables and hence requires the resyllabilitication of consonants (This phonological process will be analysed in details in Chapter 6).

B. 2.3.1.4 Demonstratives

The demonstrative pronouns: *ha:da* 'the proximal marker' and *hada:k* 'the distal marker' can be placed either before or after the noun it modifies, e.g. *ha:dal walad* or *?al-walad ha:da* 'this boy'. The demonstratives in Arabic can be attached to noun phrases either preceded by the definite article *?al* 'the' or not, e.g.

ha:da l-walad marra zaki vs. ha:da walad marra zaki
DEM.PROX.SG.M DEF-boy very intelligent DEM.PROX.SG.M boy-INDF very intelligent
'this (the) boy is very intelligent' 'this boy is very intelligent'.

When the demonstrative *hada:k(a)* 'that' is used before definite noun phrases, there is no need for an extra vowel as it is already followed by the /a/ taken from the definite article *2al* 'the' in which the glottal stop /?/ is usually omitted in connected speech, e.g.

hada:kal-waladmarrazakiDEM.DIST.SG.MDEF-boyveryintelligent'that boy is very intelligent'

Alternatively, as in the following example,

hada:k(a)	walad	marra	zaki
DEM.DIST.SG.M	boy-indf	very	intelligent
'that boy is very intel	ligent'		

/a/ is often added especially in connected fast speech to avoid the occurrence of consonant clusters. This rule applies to demonstratives ending in a consonant in both singular and plural. It is worth mentioning that in some contexts the demonstratives can be used with definite or indefinite nouns interchangeably. However, in other contexts there are nuances of meaning in that with definite nouns the entity referred to is very-well known to the speaker and interlocutor whereas with indefinite nouns the entity that is referred to by the demonstrative might be experienced or exist by chance. Demonstratives are shown in table 2.38.

	close proximity	distant proximity
Sg. Masc.	ha:da	hada:k(a)
Sg. Fem.	ha:di	hadi:k(a)
Pl.	hado:l(a)	hado:la:k(a)

Table 2.38: Demonstratives in urban Medini Arabic

B. 2.3.1.5 Relative Pronouns

The relative pronoun *?illi* 'who, that, which' can be used with singular and plural nouns and with both feminine or masculine either to refer to animate or inanimate entities; e.g.

?as^sħa:b-i *?illi* fi l-madrasa friends-1.SG.POSS **DEF-school** REL in 'my friends who are at school' and ?as-sajja:ra *?illi* ruħ-na fi:-ha DEF-car go.pfv-1.pl in-it.SG.F REL

'the car in which we travelled'.

B.2.3.1.6 Interrogative pronouns

The main interrogative pronouns in UMA can be listed as follows:

1)	mi:n 'who or whom' is used invariably with respect to gender ; in subject position					
	<i>mi:n</i> must be used initially in speech as in					
	mi:n	ra:ħ	al-be:1	ţ		
	who.SBJ	go.pfv.3.sg.m		DEF-ho	ome	
	'who went ho	me?'				
	but in object p	oosition <i>mi:n</i> ca	n be us	ed initia	ally or finally as in	
	mi:n	Sazamt?		or	Sazamt	mi:n?
	who.OBJ	invite.PFV.2.sc	G.M.SBJ	?	invite.PFV.2.SG.M.SBJ	who.OBJ?
	'who(m) did you invite?'					

The other interrogative pronouns follow the same pattern

2) *Pe:f* 'what' as in *Pe:f Samalt?* or *Samalt Pe:f*? 'what did you do?'

- 3) *fe:n* 'where'
- 4) *le:* 'why'
- 5) kamm 'how many, how much' as in

kamm	kita:b	?aſtare:t?			
how many	INDF.OBJ.books	buy.PFV.2.SG.M			
'how many books did you buy?'					
When <i>kamm</i> is attached to the preposition <i>bi</i> as in <i>bikamm</i> or <i>bkamm</i> 'how much', it					

takes on a different meaning and is used to ask about the price as in

bi-	kamm	?aʃtare:t	as-sajja:ra			
with	how much	buy.pfv.2.sg.m	DEF-car.F			
'how much did you pay for the car?'						

- 6) mita 'when'
- 7) With yes/no questions no auxiliaries are used but rising intonation is employed to express interrogatives as in *?aftare:t as-sajja:ra*? 'did you buy the car?'

B.2.4 Adverbs

and

Adverbs can be classified into four groups:

1) Temporal adverbs: ?al-jo:m 'today', bukra 'tomorrow', basad bukra or basd bukra 'after tomorrow', ?ams 'yesterday', gabil ?ams or gabl ?ams 'the day before yesterday', daħħi:n 'now', basde:n 'later'. lissas or lissa can either mean 'still or yet' depending on whether the adverb is used in positive or negative utterances, e.g. ?ana lissas or lissa fil be:t
I still at DEF-home 'I am still at home'

kalt

2) Place adverbs: *fe:n* 'where' or *maka:nma:* 'wherever' as in

maka:nma:

clean.IMPR.SG.M wherever eat.PFV.2.SG.M

'clean up wherever you were eating'

nad^sd^sif

hina 'here', hina:k or hna:k 'there', wara 'behind', gudda:m 'in front of'

- 3) Manner adverbs: *marra* 'very', *ke:f* 'how', etc. The adverb *gawa:m* 'quickly' is mainly used by the older generation, today people use *bisurfa/bsurfa* 'quickly' formed by adding the preposition *bi-* or *b-* 'by' to the noun *surfa* 'speed'.
- Number and mass adverbs: *tagri:ban* 'approximately', *gadde:f* 'how many, how much, how long', e.g.

maSrifgadde:f (gaddi?e:f)ħa-aʒlis (ħa-adʒlis)hna:k or hina:kNEG.notknow.IPFV.1.SGhow longFUT.will-stay.IPFV.1.SGthere'I do not know how long I will stay there'.

This utterance illustrates all the linguistic variables (d and resyllabification) under investigation in this study.

B.2.5 Particles

B.2.5.1 Article

The definite article *2al*- 'the' is used invariably with singular, dual and plural nouns to refer to either animate or inanimate entities from both genders, e.g. *2al-bana:t* 'the girls', *2al-kita:b* 'the book'.

B.2.5.2 Genitives

The genitive markers are *li* and *hagg*; tables 2.39 and 2.40 show their inflections:

	1st		2nd		3rd	
	masculine entities	feminine entities	masculine entities	feminine entities	masculine entities	feminine entities
Sg. Masc.	ħaggi	ħaggati	ħaggak	ħaggatak	ħaggu	ħaggatu
Sg. Fem.	ħaggi	ħaggati	ħaggik	ħaggatik	ħaggaha	ħaggatha
Pl.	ħaggana	ħaggatna	ħaggakum	ħaggatkum	ħaggahum	ħaggathum

 Table 2.39: Inflection of *hagg*

	1st	2nd	3rd
Sg. Masc.	lijja	li:k	lu:
Sg. Fem.	lijja	li:ki	liha
Pl.	lina	likum	lihum

Table 2.40: Inflection of *li*

The genitive markers $\hbar agg$ and li can be used either before or after the noun²⁰, e.g.

xud	ħaggak	al-kita:b

take.IMP.SG.M GEN.2.SG.M DEF-book

or

xud al-kita:b ħaggak

take.IMP.SG.M DEF-book GEN.2.SG.M

'take your book'

and as in

²⁰ The same comments regarding meaning made in footnote 17 apply here as well.

lijjaha:dal-kita:boral-kita:bha:dalijjaGEN.1.SGDEM.PROX.SG.MDEF-bookDEF-bookDEM.PROX.SG.MGEN.1.SG'this book is mine'

However, with inherent nouns or with nouns denoting people these genitive markers are not used and possession is shown through inflections as in 2umm-i 'my mother', walad-u 'his son' or fasra-ha 'her hair'.

B.2.5.3 Negation

2)

The particles used for negation in UMA are:

1) ma: 'not or be not' which can be used with perfect and imperfect verb aspects as in

ma:	smi§na	а		l-Saxba:r
NEG	hear.P	FV.1.PL		DEF-news
'we have not	heard th	ne news'		
and				
ma	hu	mari:	d^{ς}	
NEG	he	sick.sc	G.M	
'he is not sick	2'			
<i>mu:</i> can be us	ed befo	re deixe	s as in	
<i>mu:</i> ha: <i>da</i>			l-be:t	
NEG DEM.P	ROX.SG	.M	DEF-ho	ouse
'not this hous	'not this house'			
or adjectives as in				
?al-\$as ^s i:r	mu:	ba:rid		
DEF-juice	NEG	chilled	.SG.M	
'the juice is not chilled'				

3) *la:* can be used before *ma:* to emphasise negation as in

la:	ma:	ra:ħat		
no	NEG	go.PFV.3.SG.F		
'no, she did not go'				
or can be used on its own to form negative commands, e.g.				
la:	tru:ħ	al-madrasa	l-jo:m	
NEG	go.IMP.SG.M	DEF-school	today	
'do not go to school today'				

B.2.5.4 Prepositions

There are a number of prepositions in UMA, some of which are *fi:* 'in', *min* 'from', *dzuwwa* and its new variant *zuwwa* 'inside' or *barra* 'ouside'. Prepositions are followed by nouns, e.g.

Pana fi l-be:t

I in DEF-home

'I am at home'

or by suffixed reference pronouns, e.g. fi:ha 'in it' where - ha refers to a female entity as in

*Sifnafi:-hafatrat^sawi:l-a*live.PFV.1.PLin it-3.SG.Fperiod.SG.Flong-SG.F'we lived in it (the city (f.)) for a long time'

B.2.5.5 Conjunctions

Conjunctions include coordinators and subordinating conjunctions. Coordinators in UMA are:

1) w 'and'; the old generation joins w to the following word either with /u/ or /i/ as in

ruħt	al-be:t	w i	numt
go.pfv.1.sg.sbj	DEF-house	and	sleep.PFV.1.SG.SBJ

'I went home and slept'

whereas the younger generation use it without a vowel as in *ruht al-be:t wnumt*.

2) *?aw* 'or' as in

	mumkin	?adrus	?aw	?a:kul
	might	study.IPFV.1.SG.SBJ	or	eat.IPFV.1.SG.SBJ
	'I might study or eat'			
3)) bass 'but' as in			

?al-be:t	ħilu	bass	marra	ba <i>§i:d</i>
DEF-house	nice	but	very	far

'The house is nice but very far'

Subordinating conjunctions express:

1) time lamman/lamma 'when' as in

	lamman	?aws ^s ał		al-be:t		?akalli	m-ik	
	when	arrive.IPFV.1.	SG.SBJ	DEF-ho	ome	call.IPV	/F.1.SG.SBJ-you.OBJ.2.So	G.F
	'when I arrive	home, I will c	all you'					
2)	manner <i>zajj</i> 'a	as, like' as in						
	?aSmil-ha		zajj	ha:di			t ^s -t ^s ari:ga	
	do.IMP.SG.M-C	DBJ.SG.F like	DEM.PI	ROX.SG.	F	DEF-wa	ay.SG.F	
	'do it like this	s way'						
3)	purpose <i>Safa:</i>	<i>n</i> 'because' as	in					
	numt	badri	Sa∫a:n		bukra		msa:fra	
	sleep.PFV.1.SC	early	becaus	e	tomorr	ow	A ²¹ .PTCP.1.SG.F	

early because

'I went to bed early because tomorrow I am travelling'

²¹ The abbreviation A. stands for active, as it was not found in the Leipzig Glossing list

4) conditional *law* 'if' as in

	law	tidrus	ħa-i	tindz(3)aħ	
	if	study.IPFV.2.SG.M	will	l.FUT-pass.IPFV.2.5	SG.M
	ʻif you	ı study, you will pass'			
5)	cause	and effect walla 'othe	rwise' as in		
	?amſi	gawa:m	walla	tru:ħ	$at^{s}-t^{s}a$

Pamfigawa:mwallatru:ħat^s-t^sajja:rawalk.IMP.SGquicklyotherwisego.IPFV.3.SG.FDEF-plane.SG.F'walk quickly, otherwise the plane will go'

B.2.6 Nominal morphology

B.2.6.1 Gender

Nouns in UMA are classified into animate (masculine and feminine) and inanimate (masculine and feminine). Masculine inanimate nouns do not have specific endings to show gender as in *daftar* 'notebook', *maktab* 'office' or *be:t* 'house'. However, feminine inanimate nouns generally take the feminine marker - *a* to express gender as in fadg(3)ar-a 'a tree', *maktab-a* 'library' or *sajja:r-a* 'car'. When these female nouns are used in phrases, verbs, adjectives or pronouns, they must agree with the feminine gender by using inflections, e.g.

ha:di	l-mazra§-a	kabi:r-a
DEM.PROX.SG.F	DEF-farm-SG.F	big-sg.F
'this farm is big'		

in contrast to the masculine form where there are no inflections, e.g.

ha:da l-be:t kabi:r DEM.PROX.SG.M DEF-house big 'this house is big'

B.2.6.2 Productive patterns

The majority of nouns are derived from verbs, adjectives and other nouns, e.g. from the verb *daras* 'he studied', the noun *dira:sa* 'study' is derived. The following are examples of well-established productive patterns:

- For objects: muCCaaC as in *mursa:m* 'a pencil' and *mus^cma:r* 'a nail' and CaCCaaCa as in *yassa:la* 'a washing machine'.
- For location: maCCaC(a) as in *maktab* 'an office' and *maktaba* 'a library' and maCCiC as in *masdz(3)id* or *mazzid*²² 'a mosque' or *mawgif* 'a parking space'.
- For occupation: CaCCaaC as in dʒ(3)azza:r 'a butcher' and ħamma:l 'a porter'.
 Original Turkish suffixes i or dʒ(3)i are added to the noun as in kahraba:?i 'an electrician' or dʒ(3)o:hardʒ(3)i 'a goldsmith' and bustandʒ(3)i 'a farmer'. Indeed many of the surnames of the urban Medini families are derived from their professions using the dʒ(3)i suffix as in Xāšogği²³ in IPA /xa:fogdʒ(3)i/ meaning spoon makers or spoon sellers from the Turkish word kaşık 'spoon'.

B.2.6.3 Dual

The dual is formed by adding the morpheme -e:n to a noun. In the masculine noun galam 'a pen' becomes galame:n 'two pens'. In the feminine nouns ending in -a as in maktaba 'a library', the underlying final -t is heard before the dual ending -e:n as in maktabate:n 'two libraries' for ease of pronunciation.

²² A case of regressive assimilation

²³ This is one of the influential families in Medina.

B.2.6.4 Diminutives

In Meccan Arabic, diminutives are mainly used for nicknames (Abu Mansour 2000) whereas in UMA they can be derived from adjectives as in $fa:t^{c}ir$ 'clever/sharp/well-behaved' > $fa:t^{c}t^{c}u:r$ for males or $fa:t^{c}t^{c}u:r-a$ for females or lazi:z 'cute' > lazzu:z for males and lazzu:z-afor females based on the pattern fa?Su:l(a). In the case of nicknames, $fa:t^{c}ma$ becomes $fa:t^{c}t^{c}u:ma$.

B.2.6.5 Numerals

The cardinal numbers are:

- wa:ħid masc., waħda fem. 'one'; they can be used before or after the noun they
 modify as in wa:ħid ?axu or ?axu wa:ħid 'one brother' and waħda ?uxt or ?uxt
 waħda 'one sister'
- *?itine:n* 'two' used by the old generation or *?itne:n* used by the young generation; they are invariant in that they do not show gender distinction and they can be used either with dual nouns for emphasis as in *walade:n ?itne:n* or with plural nouns as in *?awla:d ?itne:n* 'two boys'
- The numerals 3-10 have only one form as they do not show gender distinction: tala:ta 'three', ?arbasa 'four', xamsa 'five', sitta 'six', sabsa 'seven', tamanja 'eight', tissa 'nine', safara 'ten', e. g. tala:ta ?awla:d 'three boys' and tala:ta bana:t 'three girls'.
- The numerals 11-19 do not show gender distinction either: *?iħda\$f* 'eleven', *?it^sna\$f* 'twelve', *t^sałat^st^sa\$f* 'thirteen', *?arba\$t^sa\$f* 'fourteen', *xamas^st^sa\$f*'fifteen', *s^sit^st^sa\$f* 'sixteen', *sab\$at^sa\$f* 'seventeen', *tamant^sa\$f* 'eighteen', *tis\$at^sa\$f* 'nineteen'. It can be noted that in some of these numbers the plain
 sounds change into their emphatic counterparts in the vicinity of the emphatic /t^s/

in the suffix - $t^{s}aS$. When these numbers are linked to nouns, the suffix – ar is added and they become longer as in $2arbaSt^{s}aS$ /ar kita: b 'fourteen books'

mijja '100', *mijjate:n* or *mite:n* '200', *tulutmijja* or *tultumijja* '300', *?urbu\$mijja* or *rub\$umijja* '400', etc.

The ordinal *?awwal* masc. *?u:la* fem. 'first' has a unique pattern but follows the rules of the other ordinals. Ordinals from 2 to 10 follow the pattern CaaCiC masc. and CaaCCa fem., e.g. *xa:mis* and *xa:msa* 'fifth' respectively. When ordinal numbers are used before the noun they modify, they do not alternate in that the masculine pattern is the only one used as in *xa:mis bint* 'the fifth girl'. When these numbers are used after the noun, the noun then must be attached to the definite article *?al-* 'the' and the ordinal number must agree in gender with the preceding noun, e.g. *?al-walad ?al-xa:mis* 'the fifth boy' and *?al-bint ?al-xa:ms-a* 'the fifth girl'.

B.2.7 Strong verbs

B.2.7.1	Forms
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I rasam/jirsum 'draw' xabaz/jixbuz 'bake' lamas/jilmas 'touch' γasal/jiγsil 'wash' ∫irib/ji∫rab 'drink' fihim/jifham 'understand'	Form I follows two patterns: CaCaC and CiCiC. Both patterns have the prefix ji- in the imperfect form as in jirsum 'to draw'. This form includes verbs which are transitive in meaning and serves as the basis from which the nine other forms are generated.
II raffas/jiraffis 'make sth. thin' d ^s ajjag/jid ^s ajjig 'tighten'	Form II verbs are causative in meaning and are derived from verbs, adjectives, or nouns, e.g. raffa β /jiraffi β 'to make sth. thin' is derived from the adjective rafi: β 'thin' or yassal/ji γ assil 'to wash' is derived from the noun γ asi:1 'washing'.

yassal/jiyassil 'wash'	
rajjaħ/jirajjiħ 'comfort'	
III sa:rarni/jisa:rirni 'confide in me' sa:maħni/jisa:miħni 'forgive me'	Form III verbs are usually used reciprocally by adding the appropriate suffixes as in sa:rarni 'he confided in me' in both the perfect and imperfect forms.
sa:far/jisa:fir 'travel'	A few verbs are intransitive such as sa:far 'he travelled'.
IV ?aSt ^s a/jiSt ^s i 'give' ?a3bar /ji3bur 'force'	Form IV verbs have the prefix ?a- and are rare in the dialect, e.g. ?aʕt ^s a /jiʕt ^s i.
V ?atSallam/jitSallam 'learn' ?at ^S xajjat ^S /jit ^S xajjat ^S 'was sewn' ?atʒammaSna/jitʒammaS 'get together'	Form V verbs are derived by adding the prefix ?at- or ?at ^c - to Form II verbs to express the reflexive meaning, e.g. fallam 'teach' becomes ?atfallam 'learn', or the passive, e.g. xajjat ^c 'sew' becomes ?at ^c xajjat ^c 'it was sewn'.
VI ?atsa:rarna/nitsa:rar 'confide in each other' ?atma:rad [§] /jitma:rad [§] 'pretend to be ill' ?atka:sal/jitka:sal 'pretend to be lazy'	Form VI verbs are formed by adding the prefix ?at- to Form III verbs. They express reciprocity or pretence. To form the imperfect of the plural verbs such as ?atsa:rarna the prefix ni- is added as in nitsa:rar 'we are confiding in each other'.
VII ?ankatab/jinkatib 'be written' ?anfataħ or ?atfataħ /jinfatiħ or jitfatiħ 'be open'	Form VII verbs are made passive by adding the prefix ?an or ?at- ²⁴ . For instance, the active verb ħabas 'put sb in prison' becomes passive ?anħabas 'be in prison'.

²⁴ Also see information on this form in section A.2.8.1.

 VIII ?axtabar/jixtabir 'be examined' ?aħt^cafaz^c/jiħt^cafiz^c 'be kept safe' ?aytasal/jiytasil 'wash oneself' 	Form VIII verbs are derived from Form I verbs by adding the prefix ?a - and the infix -t- after the first radical letter or sound. In yasal 'wash', the radicals are y, s and l and the infix -t- is inserted after y to generate the form ?aytasal 'wash himself'.
IX	Form IX is not productive in UMA
X stasmaħ/jistasmiħ 'ask for forgiveness'	Form X verbs are formed by adding the prefix sta- to some verbs to mean to ask for something, e.g. the verb sa:maħ 'to forgive' becomes stasmaħ 'to ask for forgiveness'.

 Table 2.41: Forms of verbs: perfect/imperfect

B.2.7.2 Inflections of the verb

B.2.7.2.1 Imperfect

Verbs in the imperfect are inflected by different prefixes and suffixes to show person, gender

and number. Tables 2.42, 2.43, and 2.44 illustrate examples of imperfect verbs:

	1st	2nd	3rd
Sg. Masc.	?adxul	tidxul/tudxul	jidxul/judxul
Sg. Fem.		tidxuli/tudxuli	tidxul/tudxul
Pl.	nidxul/nudxul	tidxulu/tudxulu	jidxulu/judxulu

Table 2.42: Inflection of the imperfect with the pattern CaCaC as in *daxal* 'enter' but takes /u/ in the imperfect: *judxul/jidxul* 'he enters'

	1st	2nd	3rd
Sg. Masc.	?aħsib	tiħsib	jiħsib
Sg. Fem.		tiħsibi	tiħsib
Pl.	niħsib	tiħsibu	jiħsibu

Table 2.43: Inflection of the imperfect with the pattern CaCaC as in *ħasab* 'count' but takes /i/ in the imperfect: *jiħsib* 'he counts'

	1st	2nd	3rd
Sg. Masc.	?arkab	tirkab	jirkab
Sg. Fem.		tirkabi	tirkab
Pl.	nirkab	tirkabu	jirkabu

Table 2.44: Inflection of the imperfect with the pattern CiCiC as in *rikib* 'ride' but takes /a/ in the imperfect: *jirkab* 'he rides'

In the imperfect verbs, gender distinction is only maintained in the 2^{nd} and 3^{rd} person singular as shown in the tables above.

The imperfect can be emphasised by showing the continuous aspect by using the

auxiliary *Samma:l* 'being' as in

Samma:l ?aktub

being.AUX write.IPFV.1.SG

'I am writing'

Similarly, the participles $ga: \mathfrak{S}id$ and $d\mathfrak{Z}(\mathfrak{Z})a: lis$ can also be used to emphasise the continuous aspect but should take inflections that must agree with gender, person and number as in

ga:Sid	?aktub	vs.	ga:Sda	?aktub
being.AUX.1.SG.M	write.1.SG		being.AUX.1.SG.F	write.1.SG
'I am writing'				

B.2.7.2.2 Perfect

Verbs in the perfect do not show gender distinction either in the plural forms or in the 1^{st} person singular, as shown in tables 2.45 and 2.46. However, there is gender distinction in the 2^{nd} and 3^{rd} person singular, e.g. *rikib* 'he rode' vs. *rikbat* 'she rode'.

Perfect verbs with the short high vowel /i/ in the first syllable show variation in the 1st and 2nd person singular and plural masculine or feminine as two realisations are possible: the

epenthetic and the syncopic as in *rikibt* and *rkibt*, respectively, shown in table 2.46. Chapter 6 will explain these phonological features in detail by presenting the data quantitatively.

	1st	2nd	3rd
Sg. Masc.	daxalt	daxalt	daxal
Sg. Fem.		daxalti	daxalat
Pl.	daxalna	daxaltu	daxalu

Table 2.45: Inflection of the perfect verb with the pattern CaCaC as in *daxal* 'he entered'

	1st	2nd	3rd	
Sg. Masc.	rikibt/rkibt	rikibt/rkibt	rikib	
Sg. Fem.		rikibti/rkibti	rikbat	
Pl.	rikibna/rkibna	rikibtu/rkibtu	rikbu	

Table 2.46: Inflection of the perfect verb with the pattern CiCiC as in *rikib* 'he rode'

B.2.7.3 Participles

The active and passive participles follow the patterns CaaCiC and maCCuuC as in *xa:ridg* and *maftu:* \hbar respectively. They can both express the perfective, continuous or future aspect depending on the context, e.g.

Pal-ma	aħal	maftu:ħ	daħħi.	'n
DEF-st	ore	open.PTCP.PASS.SG.M	now	
'the s	tore is c	ppen'		
or				
?ana	fa:tiħ		al-maħal	bukra
Ι	open.P	TCP.ACT ²⁵ .SG.M	DEF-shop	tomorrow
	•			

'I am going to open the store tomorrow'.

B.2.8 Weak verbs

B.2.8.1 Geminate verbs

Geminate verbs in UMA follow the pattern CaCC as in *fadd* 'to pull', *radd* 'to return', *habb* 'to love' and *hadzdz* 'to go on pilgrimage'. Tables 2.47 and 2.48 show the inflections of geminate verbs in the imperfect and perfect.

	1st	2nd	3rd
Sg. Masc.	?aʃudd	tiʃudd/tʃudd	ji∫udd
Sg. Fem.		tiʃuddi/tʃuddi	tiʃudd/tʃudd
Pl.	niʃudd/nʃudd	tiʃuddu/tʃuddu	ji∫uddu

Table 2.47: Inflection of the geminate verb in the imperfect

	1st	2nd	3rd
Sg. Masc.	∫adde:t	∫adde:t	∫add
Sg. Fem.		∫adde:ti	∫addat
Pl.	∫adde:na	∫adde:tu	∫addu

Table 2.48: Inflection of the geminate verb in the perfect

There is variation in the imperfect with the prefixes ni- vs. n- and ti- vs. t-, which will be dealt with in detail in Chapter 6 on syllable structure. The active and passive participles follow the patterns CaaC_iiC_i and maCC_iuuC_i as in *fa:did* 'pulling tight' and *mafdu:d* 'pulled tight' respectively.

B.2.8.2 Verbs I ?

These verbs start with the glottal stop 2 as in 2axad 'he took' or 2akal 'he ate'. This initial glottal stop disappears after adding the imperfect prefixes except in the 1st singular masculine and feminine where it is maintained and the vowel lengthens. There is gender distinction in the 2nd and 3rd singular as in table 2.49.

	1st	2nd	3rd
Sg. Masc.	?a:xud	ta:xud	ja:xud
Sg. Fem.		ta:xdi	ta:xud
Pl.	na:xud	ta:xdu	ja:xdu

Table 2.49: Inflection of verbs I ? in the imperfect

As for the perfect forms, there is no gender distinction in the 1st, 2nd, and 3rd plural or in the 1st person singular. The perfect form of the verb *?axad* 'to take', in the 1st and 2nd person singular, undergoes regressive assimilation, i.e. devoicing and thus /d/ becomes /t/ *?axatt* when followed by the personal pronoun – *t* as shown in table 2.50 below.

	1st	2nd	3rd
Sg. Masc.	?axatt	?axatt	?axad
Sg. Fem.		?axatti	?axadat
Pl.	?axadna	?axadna	?axadu

Table 2.50: Inflection of verbs I ? in the perfect

The imperative is *xud* 'take', the active participle *?a:xid* 'taking', and the passive *ma?xu:d* 'taken'.

B.2.8.3 Verbs I w

Verbs with initial w- have the following paradigm in both the imperfect and perfect.

	1st	2nd	3rd	
Sg. Masc.	?aws ^s al	tiws ^s al	jiws ^ç al	
Sg. Fem.		tiws ^s ali	tiws ^s al	
Pl.	niws ^s al	tiws ^s alu	jiws ^s alu	

 Table 2.51: Inflection of verbs I w in the imperfect

	1st	2nd	3rd
Sg. Masc.	wis ^ç ilt/ws ^ç ilt	wis ^ç ilt/ws ^ç ilt	wis ^ç il
Sg. Fem.		wis ^ç ilti/ws ^ç ilti	wis ^ç lat
Pl.	wis ^ç ilna/ws ^ç ilna	wis ^ç ilna/ws ^ç ilna	wis ^ç lu

Table 2.52: Inflection of verbs I w in the perfect

The imperative is *?aws^sal* (masc.), *?aws^sali* (fem.) 'arrive' and the active and passive participles are *wa:s^sil* 'arriving' and *maws^su:l* 'arrived'.

B.2.8.4 Verbs II w/j

These verbs have a medial glide /w, j/ in their roots as in **gwm* and **fjl* from which *jigu:m* 'to stand up' *and jifi:l* 'to carry' are derived respectively. Table 2.53 gives the inflection of this type of verbs in the imperfect.

	1st	2nd	3 rd
Sg. Masc.	?aſi:l	tiʃi:l /tʃi:l	jiʃi:l /jʃi:l
Sg. Fem.		tiʃi:li/tʃi:li	tiʃi:l /tʃi:l
Pl.	nifi:l/nfi:l	tiʃi:lu /tʃi:lu	jiʃi:lu/jʃi:lu

Table 2.53: Inflection of verb II w/j in the imperfect

In the perfect, these verbs have long vowels in medial position but they become short before consonant-initial suffixes in the 1st and 2nd person masculine and feminine singular and plural as demonstrated in table 2.54.

	1st	2nd	3 rd
Sg. Masc.	∫ilt	∫ilt	∫a:l
Sg. Fem.		ſilti	∫a:lat
Pl.	∫ilna	ſiltu	∫a:lu

Table 2.54: Inflection of verb II w/j in the perfect

The imperatives are formed through the use of long vowels as in *fi:l* (masc.), *fi:li* (fem.) 'carry'; the active and passive participles are *fa:jil* 'carrying' and *mafju:l* 'carried'.

B.2.8.5 Verbs III j

These verbs have the glide /j/ in final position in their roots *rmj or *mfj which turns into /i/ in the final position as in *jirmi* 'to throw', *jim/i* 'to walk' or in the UMA dialect 'to cope' or 'to leave'. The imperfect and perfect paradigms of *jim/i* are shown in tables 2.55 and 2.56 below.

	1st	2nd	3 rd
Sg. Masc.	?am∫i	tim∫i	jim∫i
Sg. Fem.			tim∫i
Pl.	nim∫i	timʃu	jim∫u

Table 2.55: Inflection of III j verbs in the imperfect

	1st	2nd	3rd
Sg. Masc.	miʃi:t/mʃi:t	miʃi:t/mʃi:t	mi∫i
Sg. Fem.		miʃi:ti/mʃi:ti	mi∫jat
Pl.	miʃi:na/mʃi:na	miʃi:tu/mʃi:tu	mi∫ju

Table 2.56: Inflection of III j verbs in the perfect

Variation is shown in the perfect forms, e.g. in the 1st person singular there are two different realisations with respect to the number of syllables: $mi_ifi:t$ (2 syllables)/mfi:t (1 syllable). This variation of resyllabification will be analysed in detail in Chapter 6. The imperative is 2amfi for singular and 2amfu for plural without gender distinction; the active and passive participles are mimaffi/mmaffi 'walking/coping' and ma:fi 'walked/coped'.

AB.3 Syntax of the Bedouin and urban dialects

In this section, the syntax of BMA and UMA are combined because the two dialects follow the same grammatical rules; however, as phonology and morphology are different, examples given are from both varieties to illustrate the syntactic points and will be arranged in the following way BMA/UMA.

AB.3.1 Noun phrases

Noun phrases are either definite or indefinite. Indefinite noun phrases like

bint	kabiːra
INDF-girl	big.SG.F
'a big girl'	
or	
li\$bat	walad
INDF-toy	INDF-boy
ʻa boy's toy'	

Noun phrases can become definite by the use of: 1) the definite article as in *?al-be:t/?il-be:t*

'the house', 2) a pronoun suffixed directly to the noun²⁶ as in

kutub-u

INDF-books-his

'his books'

3) construct phrases as in galam al-bint INDF-pen DEF-girl 'the girl's pen'

²⁶ For more explanations see Holes (2004: 199).

Quantifiers like *kull* 'every', *fwajja/fuwajja* 'some, a little, a few', *?ajj/?ajji* 'any' are used before the nouns they modify as in:

?ajj/?ajji fusta:n 'any dress'

fwajjat/fuwajjat Se:f 'some bread'

As we can see from these examples there is variation in the number of syllables, e.g. *fwaj.jat* is mainly used in BMA where the occurrence of consonant clusters is allowed whereas in UMA *fu.waj.jat* is used because initial consonant clusters are avoided by adding an anaptyctic vowel.

AB.3.2 Verb phrases

According to Holes (2004) the verb phrase consists of a verb, the obligatory component, and all of its optional dependents such as auxiliary verbs, complements, particles and adverbial elements.

AB.3.2.1 Tense and aspect

The present tense is expressed by using the simple imperfect; time adverbs can be added to intensify the meaning intended.

Time adverbs such as *da:jman* 'always', and *kill/kull* 'every' can be used to refer to regular habits as in:

huw da:jman jalsab mas ?assha:b-ih/27

huwwa da:jman jil?ab

masa ?assha:b-u

²⁷ This utterance is from the Bedouin data and its glossing is identical to the urban utterance

he always play.IPFV.3.SG.M with OBJ.friends-POSS.3.SG.M 'he always plays with his friends'

To refer to actions happening now, in BMA it can be expressed without the prefix *bi*- as in *hu: jalSab maS ?as^cha:b-ih* 'he is playing with his friends' whereas in UMA the prefix *bi*- is added to the imperfect as in *huwwa bijilSab maSa ?as^cha:-bu*

The past tense is expressed by the use of the perfect form; some particles can be added to emphasise the meaning. For instance, $xala:s^{c}$ 'already' can be used to emphasise completion of the action as in:

xala:s^c kammalt il-wa:dzib/

xala:s^ckammaltal-wa:dzibalreadydo.PFV.1.SGDEF-homework'I have already done the homework'.

The future tense is expressed by the prefix $\hbar a$ - or $ra:\hbar$ as in $\hbar a$ -agu:mbadrior $ra:\hbar$ agu:mbadriwill-get up.1.SGearlywillget up.1.SGearly'I will get up early'.

AB.3.3 Word order and agreement

Any utterance in BMA and UMA as is the norm in Arabic dialects consists of a subject and a predicate. Holes (2004: 250-252) explained that the subject can be: 1) freestanding as in

ra:ћ ?aħmad al-be:t go.IPFV.3.SG.M ?aħmad-SBJ DEF-home

'Ahmed went home'

or 2) attached to the verb by morphemes as in

ruħt-i	l-be:t	badri	Pams
go.PFV-SBJ.2.SG.F	DEF-home	early	yesterday
'you went home early	y yesterday'		

The predicate can:

1) consist of a verb only as in

Ahmed na:m

Ahmed-SBJ sleep.PFV.3.SG.M

'Ahmed slept'

2) have a verb and a complement as in

daras	Ahmed	al-&aːmʕa fi London
study.pfv.3.SG.M	Ahmed.SBJ	DEF-university in London

3) or be without a verb as in

<i>?inta</i>	da:jman	mafyu:l
you.2.SG.M	always	busy.PTCP.PASS.SG.M
'you are alway	ys busy'.	

Word order in BMA and UMA is characterised by its flexibility in that it can be SP or PS (S= subject and P= predicate).

Concerning agreement, BMA has gender distinctions in the plural while UMA has no gender distinctions in the plural.

AB.3.4 Existential sentences

The main existential particle is *fi:/ma:fi* (neg.) as in *fi mada:ris giri:ba mnalbe:t/ fi mada:ris gari:ba mnalbe:t* 'there are schools near the house' and *ma:fi mada:ris kwajjsa giri:ba*

mnalbe:t/ma:fi mada:ris kuwajjisa gari:ba mnalbe:t 'there are no good schools near the house'.

AB.3.5 Conditional sentences

Two particles can be used to convey the conditional aspect: *?iða/?iza* or *law* 'if'. These can be used in the following ways:

1)	2iða/2iza or law can both be used to refer to a future condition as in					
	?iða/?iza or law	ra:ħ-at	Fa:tma	il/al-be:t	badri,	
	if	go.PFV-3.SG.F	Fatma	DEF-house	early	
	ħa-tkallim-ni					
	will-call.IPFV.SBJ.3	S.SG.F-OBJ.1.SG				
	'If Fa:tma goes how	me early, she will o	call me'.			
2)) <i>?iða/?iza</i> or <i>law</i> can both be used to refer to a hypothetical condition as in				s in	
	?iða/?iza or law Faːtma raːħ-at, hu/huwwa mumkin jiruːħ					
	if Fa	tma go.PFV-3.SG.F	F he	could	go.IPFV.3.SG.M	
	'If Fa:tma went, he would/could go'.					
3)) $2i\delta a/2iza$ or <i>law</i> can both be used to refer to a counterfactual condition in which <i>ka</i> :n					
	is added to the main clause as in					

?iða/?iza or law	daras-ti,	ka:n	nadz(3)aħ-ti
if	study.PFV-2.SG.F	will/can.AUX.PFV	pass.PFV-2.SG.F
	111	15	

'If you had studied, you would have passed'.

AB.4 Conclusion

After writing the dialect descriptions of BMA and UMA, I have become more aware and intrigued by the similarities and differences in features between the two dialects. As a native

speaker of the urban variety, listening and transcribing the urban interviews happened naturally whereas the transcription of the Bedouin data required a lot more effort, particularly with the older female generation. Diachronically, the Bedouin and urban varieties spoken in Medina descend from two distinct genealogical sources. Synchronically, and based on my transcription experience and due to the increased contact between the two varieties, I can hypothesise that a form of a koineised Medini dialect is being created. In order to assess this claim empirically, casual speech data will be analysed quantitatively with respect to two linguistic variables in chapters 5 and 6.

Chapter Three

Koineisation and dialect contact

Koineisation is the term used here to conceptualise the language change taking place in Medina where two mutually intelligible varieties are in daily contact. The outcome of dialect contact does not develop in a haphazard fashion. A number of factors manipulate and shape linguistic change. Trudgill (2004) differentiated between two linguistic circumstances: firstly, the *tabula rasa* colonial situation, in which there is no previous interaction between people speaking the language or variety in question. Secondly, the creation of new towns in which some contact between speakers already existed and thus had a pivotal role in the creation of the new-town koiné. The similarities between the English varieties spoken in widely separated tabula rasa colonial situations, such as Australia and South Africa, are based on the fact that it is possible to determine, to a certain degree, the outcome of dialect contact. According to Trudgill (2004), in language/dialect contact situations there are three main criteria which might explain linguistic change: 1) the typology of dialects, 2) the proportion of speakers of the different dialects and 3) the language universals that might influence change. Such similarities between the southern hemisphere Englishes support this deterministic aspect of new dialect formation. In contrast, in non-tabula rasa dialect contact situations, linguistic change cannot be predicted and so would be different from community to community (see Trudgill 2004). The latter cirmustances can be compared to the linguistic situation in Medina and is, therefore, worth investigating separately.

Whether in *tabula rasa* colonial situations or in non-*tabula rasa* dialect contact situations, a number of essential processes such as levelling, koineisation or new-dialect formation may arise, as has been identified by a number of scholars. These processes are found in dialect contact situations as is the case in Medina, where two mutually intelligible

but distinct varieties of the same language come into contact. In the following section, the theoretical framework of koineisation will be explained because it may lead to a number of outcomes including levelling, accommodation, new-dialect formation and so on. However, it is worth indicating that not all of these outcomes are due to koineisation. For example, levelling, by which the marked features of dialects in contact situations are levelled out, does not necessarily lead to koinesation or to the formation of a new stable dialect.

3.1 Koineisation from a theoretical perspective

Definition and characteristics

The linguistic outcomes of dialect contact are not random or haphazard but can be explained from different approaches, one of which is koineisation. Historically speaking, koiné, a term used to refer to a dialect of ancient Greek, emerged during the expansion of the Athenian Empire in the 5th century BC. This koiné developed as a result of regular contact between the older dialects, like the Attic dialect of Athens and the Ionic dialects of Asia Minor (Tuten 2007). Kerswill and Willams (2005) defined koineisation as

"... the type of language change that takes place when speakers of different, but mutually intelligible language varieties come together, and which may lead to new dialect or koine formation."

(Kerwill and Williams 2005: 1023)

According to Siegel, the definition of the term koiné implies the mixing of different dialects in a particular region which ultimately leads to the emergence of a koiné which then might become the standardised vernacular. He defined the modern koiné as follows,

"... the stabilised 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 characterised by a mixture of features of these varieties and most often by reduction or simplification in comparison."

(Siegel 1985: 363)

Furthermore, Siegel goes on to make the distinction between two types of koiné: the

regional koiné and the immigrant koiné. He defines them as follows, the regional koiné:

"... results from the contact between regional dialects of what is considered a single language. This type of koine remains in the region where the contributing dialects are spoken although it may be used outside the region as a trade language with other linguistic groups."

(Siegel 1985: 363-364)

The immigrant koiné:

"It may also result from contact between regional dialects; however, the contact takes place not in the region where the dialects originate, but in another location where large numbers of speakers of different regional dialects have migrated."

(Siegel 1985: 364)

The original Greek koine, Latin in the Roman Empire and koineised colloquial Arabic are

examples of regional koines; Israeli Hebrew, Canadian Franch or Hawaiian Japanese are

examples of immigrant koines (Siegel 1985).

Processes and stages of koineisation

Samarin (1971) as cited by Siegel (1985:364) was the first to introduce the term koineisation: a process which results in the formation of a koiné. The formation of the new dialect (koiné) is the linguistic product arising from massive waves of migration of speakers of mutually intelligible varieties to a region where contact between these varieties was occasional or never existed. After migration, however, interaction and more routine contact among these speakers becomes the norm in that designated area and might lead to the emergence of new dialect formation. Koineisation involves certain processes; namely, mixing, levelling, simplification, interdialect formation, reallocation and focusing. Koineisation usually takes three generations to progress: adult migrants, their children and grandchildren, the latter two being born and raised in that specific mixing area. The processes of koineisation from mixing to reallocation involves three stages. The last process, focusing, is when the formation of the new dialect is achieved (Siegel 1985; Kerswill 2002; Trudgill 2004 and Trudgill and Britain 2005).

Stage I involves the initial mixing and interaction amongst adult speakers who attempt to accommodate to one another but challenges are encountered partly due to age inhibitions and limitations. Mixing is the coming together of speakers of different dialects in a specific location which naturally results in regular contact of these dialects. An example of this situation happened in Medina with the mixing of the dialects of the earlier diverse urban inhabitants many centuries ago, and which resulted in the creation of urban Medini. Subsequently, after the discovery of oil and the urbanisation of Medina, the city experienced another type of migration, this time, by the Bedouin speakers. Intensive contact between the urban population, the host community, with the Bedouin immigrants have since been the norm. As a result of mixing, 'rudimentary levelling', 'simplification' and 'interdialect development' (see Trudgill 2004: 89-99), are the possible outcomes in Stage I.

Rudimentary levelling is the reduction or loss of regionally marked variants and subsequently, the adoption and use of more regionally widespread linguistic features. Rudimentary levelling does not take place randomly but is influenced by a number of linguistic and social factors, examples of which are salience, normative attitudes and comprehensibility. Such factors might affect its course of change and could either enhance or inhibit accommodation, a key role in levelling and koineisation. Here, we have a multidimensionality of the functions of these factors, and therefore, sometimes they yield contradictory and unpredictable outcomes. For example, with regard to the interdentals pronounced by the Bedouins but not the urban speakers, neither group would accommodate to each other. One likely explanation might be that although this linguistic feature is quite salient and does not affect comprehensibility, it is regarded negatively by both communities and so would not be adopted. As a native speaker of the urban variety, this feature is stereotypically associated with the more traditional and conservative Bedouin community while the urban feature (use of stops in place of interdentals) is regarded by the Bedouins as non-pure or unacceptable Arabic realisations of interdentals.

Simplification means the replacing of irregular opaque forms peculiar to one dialect with easier and more transparent forms or grammatical rules that can be adopted by speakers of both dialects. This process can be seen in the ongoing change of gender distinction in the third person plural verbs in Bedouin Medini Arabic being substituted by the more general neutral masculine verb forms. Currently the masculine form is being used alongside the female one to refer to female speakers as in *?il-bana:t ħrigaw* (*ħrigan* fem.) or *smiSaw* (*smiSn* fem.) taken from tables 2.18 and 2.19. This means that the Bedouin speakers could potentially adopt the neutral masculine form and gender distinction may gradually disappear. Moreover, the fact that such gender-based distinction is not found in the urban Medini grammar, one of the contributing dialects in the mixing, could influence and accelerate such change.

According to Trudgill (2004: 94), the development of interdialect forms can be classified into: 1) 'intermediate forms' caused by partial accommodation, 2) 'simpler or more regular forms', and 3) 'hyperadaptive forms'. In *tabula rasa* colonial situations, the following examples illustrate each type (see Trudgill 2004: 94-99). Firstly, in Quebec originally there were three different forms in French, for *gens* 'people' in the mixing of dialects: Standard /3ã/, Picard /3ẽ/ and Saintongeais /hã/; all of these forms led to the development of the intermediate Québécois /hẽ/ form (examples by Mougeon and Beniak 1994: 26 as cited in Trudgill). Secondly, simplification and regularity can be seen in the Afrikaans verb system

examined by Combrink (1978). The present-tense inflectional endings of the verb *werk* 'to work' in Standard Dutch and Afrikaans are compared in the table below (cited by Trudgill (2004: 94).

Dutch		Afrikaans	5
singu	ar plural	singular	plural
1. werk	werken	werk	werk
2. werkt	werken/wer	rkt werk	werk
3. werkt	werken	werk	werk

 Table 3.1: Simplification in Afrikaans (source: Combrink (1978) cited by Trudgill 2004: 94)

As we can see, verb inflections in Afrikaans, colonial Dutch, have become simplified as a result of language contact. Thirdly, the hyperadaptive forms occur when speakers accommodate to each other but adopt forms from the dialect mixture and apply them to the grammar unsystematically and thus produce new incorrect forms. For example, new immigrants from the UK to New Zealand inserted an initial /h/ in stressed-vowel initial words such as: *and*, *all* or *apple* and this behaviour became "unusally widespread as a result of misanalyses during the course of accommodation" (Trudgill ibid: 96). However, this feature which was mainly used by adult speakers (first generation) and was inherited by their children (second generation), did not continue to Stage III.

Stage II is discernible by children's roles in shaping new-dialect formation. This stage is characterized by extreme variability. Trudgill (2004) points out that the second generation, the children who were born in the area where dialect mixing and contact occur, are spoiled for choice in terms of the linguistic models to choose from, similar to shopping in a supermarket. He explains that at this stage there is no shared peer-group dialect or a standard to comply with, but, by contrast, children are free to select subconsciously during their language acquisition, from the plethora of variants they are exposed to. Therefore, Stage II is portrayed by 'intra-individual and inter-individual variability' (Trudgill 2004: 105-108). Trudgill (ibid) argues that abundant variability is particularly noticeable in speakers' idiolects as well as in their use of dialects with each other in mixing situations more than in stable or unchanging speech communities. This stage is so chaotic and disordered to the extent that accommodation cannot take place as speakers do not really engage in long-term accommodation. On the other hand, both levelling and interdialect formation continue to operate at Stage II. This results in the second generation of immigrants producing intermediate or fudged linguistic realisations which were not actually present in any of the dialects contributing to the mixture, but have developed through their interaction. At this stage of extreme variability, at both the individual and the community level, accommodation is not considered to be the driving force behind levelling, though it may be felt so. Trudgill (ibid) explains the fact that some features disappear in this stage because they are underrepresented. He uses the term 'apparent levelling' (2004: 109) to refer to a type of levelling which is caused not by accommodation but is attributed to the fact that some variants are not transferrable in Stage II because their use is rare in terms of quantity and thus they do not comply with the threshold effect. An example from Trudgill (2004) is that in New Zealand English, the low or mid central vowel in KIT, a feature of lowland Scottish English, though present in Stage I is absent in Stage II because the majority of the Scottish immigrating to New Zealand were Highlanders or educated speakers who did not have this linguistic feature.

Stage III is denoted by linguistic stability during which the third generation (grandchildren) are limited to a curbed set of linguistic variants in their levelling process, which had started in the previous stages. In dialect-contact situations, children at this stage select and use the majority linguistic features. Trudgill gives an example of a southeast-of-England English feature that began in the early nineteenth century, where the lexical sets of START with the back vowel [a:] used mainly by the lower classes became accepted in society by the 1860s (MacMahon 1994: 456 as reported in Trudgill ibid). In Australian and New Zealand English, however, a range of more front realisations of START are used, one of which is [a:] indicating that the southeast variant [a:] was in the minority and hence was not naturally adopted in the Australian Continent despite being considered 'a southeast-of-England sort typologically' (2004: 115). Moreover, sometimes majority forms do not survive in the levelling process because of their markedness. For example, the use of /I/, the lax vowel, in unstressed syllables as in *wanted*, *changes* and *market*, considered to be a southeast-of-England majority feature has not been adopted in the Southern Hemisphere Englishes. Instead, /ə/, the unmarked form in the same phonological environment, was adopted. This typical example illustrates how the unmarked forms, though in the minority, can defeat the marked majority linguistic features (Trudgill 2004: 119).

One of the key processes in koineisation at Stage III is reallocation. In some dialect contact cases, the number of variants in dialect mixing may be decreased to two variants which could be reallocated or reattributed to different functions either sociolinguistic (based on social factors) or allophonic or phonetic (based on linguistic factors). The alternation between [a:] and [æ] in the lexical set of DANCE in Australian English is an interesting illustration of sociolinguistic reallocation in that the use of [a:] is considered a prestigious variant while [æ] is regarded a lower-status variant. An example of phonological reallocation is found in Canadian Raising of the diphthongs [aɪ] and [ao] which have become [əɪ] and [əo]. During the mixing of dialects and before the development of the Canadian variety, the Scottish-type central diphthongs coexisted with the Southern England-type open diphthongs and both survived the levelling process. However, the two variants were reallocated to specific phonological environments in that the open onset diphthongs were used before voiced consonants as in file [aɪ] and load [ao] whereas the central onset diphthongs were used before voiceless consonants as in price [əɪ] and mouth [əʊ]. In this way, these two types of

diphthongs have been refunctionalised as new allophonic variants (Chambers 1973 and Trudgill 2004:88). Moreover, reallocation happens when two or more variants coexist in roughly equal proportions in the mixing (Trudgill 2004: 124). Another sociolinguistic example of reallocation of /dʒ/, one of the variables under investigation, examined by Al-Wer (1991), will be discussed further below. Finally, focusing is the sixth process during which the new variety gains the status of the native language and thus becomes stable. Processes 1 to 5 constitute koineisation while processes 1 to 6 constitute new dialect formation.

Accommodation is the most significant mechanism or underlying factor in the entire process of koineisation. It becomes active and partially operational at Stage I with adults and is fully operative at Stage III with their grandchildren. However, during Stage II, it becomes less significant due to the chaotic language behaviour of the children (second generation) who are exposed to the many variants of the original mixing. The reason or the driving force for accommodation lies in the highly influential maxim according to which human beings "talk like the others talk" (Keller 1994: 100 as cited in Trudgill 2004: 27). There exist two types of accommodation: short-term and long-term accommodation. The former is the first step towards the potential development of a koine and it materialises when interlocutors of different dialects accommodate to one another either consciously or subconsciously in specific conversational contexts. However, after a period of time, long-term accommodation kicks in, Kerswill (2002) defined this type of accommodation

"... as semi-permanent changes in a person's habitual speech after a period of contact with speakers using different varieties."

(Kerswill 2002:680)

Now, let us recap the main steps in the trajectory of koineisation or new-dialect formation:

• Stage I is the first step consisting of dialect mixing

- Stage II is characterised by extreme inter and intra individual variability due to the existence of different variants and the freedom of choice
- Stage III, where accommodation is of the utmost importance and hence the most common variants, whether in terms of majority or unmarkedness, will survive. According to Trudgill, at this stage

"... minority-variant users accommodate to majority-variant users as koineisation progresses, and the majority form wins." (Trudgill 2004: 127)

3.2 Case studies on koineisation in the Western world

Evidence of koineisation was attested in **Norway** by Kerswill (1994) in the town of Bergen. Bergen witnessed two waves of immigration: the first was during the 19th century from the surrounding deprived rural areas to the prosperous and cosmopolitan town of Bergen, while since 1970 there has been a reverse migration, that is, from Bergen back to the rural districts. The urban dwellers of Bergen are known as Bergeners whilst the rural immigrants are known as Strils, both of whom have their own distinct linguistic varieties. Kerswill (ibid) investigated the speech of Stril migrants and found signs of the formation of a potential new variety through focusing by the first generation of migrants. His data consisted of samples of formal speech from Stril migrants who were divided into a number of social parameters. Three linguistic variables were examined at the phonological, morpho-lexical and suprasegmental levels as follows respectively: schwa-lowering, a number of morpho-lexical variables for which an index was calculated and tonemicity, which is the contrast between two lexical word-tones (for more details see Kerswill 1994: 49-101). In the study, Kerswill (ibid) found that Stril immigrants do accommodate to the native urban Bergen on many occasions and for different reasons. In addition, he stated that the speech of the first Stril migrants show evidence of the koineisation processes; namely, levelling, simplification and reallocation. An example of levelling among the Stril migrants is the reduction of a number of localised features, e.g. the loss of the vowels /e/ and /e:/ and the adoption of the Bergens /o/ and /o:/ as in *gelv* > *golv* 'floor' (1994: 157). An example of simplification in Stril speech occurred with the loss of morpho phonemic alternation of velars and palatals in noun morphology, as in /ta:k/ 'roof' and/ ta:c a/' the roof'. Instead, Stril migrants favour the constant Bergen form /ta:ka/, which is simpler to accommodate. Reallocation was noticeable when Stril migrants adopted Bergen features which were refunctionalised to specific sociolinguistic functions, e.g. whilst at work. All of these cases predict the increase of norms and hence the development of a koine in the Bergen speech community.

The new town of Milton Keynes in the UK created in 1967 and situated 80 kms from London was the new desirable location for people migrating, mainly from Southeast England and London. Kerswill and Williams carried out a series of projects between 1990-94 to investigate the outcome of dialect contact among the migrants and their offspring (Kerswill and Williams 2005, 2000, 1999). The following account draws on a series of studies conducted in Milton Keynes. When a town is brand-new, there is no established linguistic model of adult speech. Instead, the children of the first generation or sometimes the second fill this linguistic gap by forming a new town koiné. Kerswill and Williams' research is based on the hypothesis that children, particularly older children, have the potential for forming the new town koiné; therefore, the participants were 48 male and female working-class children divided into groups of four, eight and twelve years of age. To assess linguistic behaviour between the children's speech and that of their parents, children's data were collected through informal and semi-structured interviews and then compared to their caregivers' speech, especially the mothers. Moreover, data from the pre new-town dialects from six speakers whose birth dates spanned a hundred years, were collected. A few linguistic variables were considered, some of which are th-fronting, h-dropping, t-glottaling (See Kerswill & Williams 2000:83). They found that the children's speech was levelled as they accommodated to the innovative southeastern variants²⁸, which are also spreading to other regions in the southeast and the UK as a whole.

In order to explore and extend the results, a follow-up project has also been conducted across different areas in England to evaluate the process of dialect levelling and possibly koineisation and its link to social and geographical mobility (see Williams and Kerswill 1999). In the dialect levelling project, researchers chose Hull, Reading and Milton Keynes as their research sites to assess the amount, direction and speed of dialect levelling. Data from the three towns were collected in the form of semi-structured and relaxed sociolinguistic interviews recorded from ninety-six male and female adolescents aged 14-15 from two social classes: working and middle. Moreover, speech from four elderly (70 or over) working class male and female speakers was also recorded for comparison. The choice of these three towns was based on these hypotheses:

- a) In areas affected by high mobility, inhabitants do not have close-knit networks and the speech community is diffuse and thus levelling can happen rapidly; for example, Milton Keynes.
- b) In areas in which inhabitants have close-knit social networks, the speech community becomes focused on a linguistic conformity and changes seldom happen; for example, Reading.
- c) In areas which are far from regional metropolitan centres from which the most widespread linguistic features diffuse known as 'the gravity model'

¹²⁰

²⁸ See Kerswil & William 2000

(Trudgill 1983:73), linguistic change could be constrained. Another constraint on change may be limited upward social mobility. An example here is Hull, where in addition to its distance from London, limited upward social mobility can also hinder linguistic change.

A number of the most salient linguistic variables were investigated from the consonant system, vowels and suprasegmentals in the three accents²⁹. Results of language variation from the three towns indicated that levelling and hence convergence towards a levelled variety does occur in each but in different ways and for different purposes. For instance, one of the variables investigated was the PRICE vowel, whose predominant variant is "a back, diphthongal [ar]" plus the less dominant "raised/back centralised variants" (Kerswill & William 1999:156). In Milton Keynes and Reading change was proved to exist towards the [aɪ] variant led by the teenage speakers. In Milton Keynes, the change is rapid and discontinuous in that there is no connection between the adolescents' linguistic behaviour with that of the elderly, reflecting the lack of close-knit networks between the young and old generations. However, in Reading the changes are present but in a continuous fashion reflecting the close contact the teenagers have with the older generations (parents and grandparents).

In complete contrast, in Hull the variants of the PRICE vowel are a diphthong $[a\underline{i}]$ used before voiceless consonants and a monophthong $[\underline{a}:]$ used before voiced consonants. The use of these two variants in their linguistic distribution is retained among the teenage and older speakers particularly the working-class whereas in the middle-class speech there is merger and the diphthong $[a\underline{i}]$ is used as the norm in both environments. Thus, in Hull, its close-knit community is acting as an inhibiting factor and this vowel is resisting change.

²⁹ See Keswill & William 1999

The change of consonants witnessed an opposite direction in that the consonantal features originating in London and the Southeast are being accommodated to by young speakers throughout the UK. An example of this is t-glottaling which is the norm in the linguistic behaviour of the young working class. It is the replacement of the intervocalic /t/ by the glottal stop /?/ as in *butter*, or in a word final position as in *carpet*. This levelled feature is used by the teenagers including the middle class in these towns even though they differ in their social networks and geographical locations. This change in Reading and Milton Keynes could be justidifed due to their proximity to London where it originated from as was stated by William and Kerswill (1999: 159)

"... London or Cockney English which has spread so widely across both geographical and social space that it has come to be 'perceived as a stereotype of urban British speech."

(Milroy, Milroy & Hartley 1994: 3 cited in William and Kerswill 1999: 159) Surprisingly, data showed that this consonantal feature is also used in Hull not only by working class adolescents but also by their middle class counterparts. These results were not expected for Hull as its inhabitants have close-knit social networks and less contact experience with London. The following table adapted from Williams and Kerswill (1999: 21) shows the percentage of the use of glottalised-t in the three towns.

% [?] for intervocalic /t/	Middle class		Working class	
	girls	boys	girls	boys
Milton Keynes	25.4	48.6	75.2	83.0
Reading	29.5	14.1	92.2	100
Hull	30.9	20	71.8	82.7

Table 3.2: Use of [?] in the three towns

This example of variation could be explained in terms of dialect levelling which was defined by Williams and Kerswill as:

"... a process whereby differences between regional varieties are reduced, features which make varieties distinctive disappear, and new features develop and are adopted by speakers over a wide geographical area."

(Williams and Kerswill 1999: 149)

It is true that levelling has occurred in all the dialects of the three towns but through different underlying processes. For example, in Milton Keynes the change was more rapid owing to its high geographical and social mobility and its discontinuous generation, than in Reading where the change was gradual across the different genrations. In Hull, the motive of change was distinct as adolescents chose to use the non-standard Southern features from the TV, radio, music, festivals, and so on to echo the national youth culture.

Similar patterns can also be found beyond the Western speech communities and the

following sections will deal with instances of koineisation in the Arab world.

3.3 The historical evolution and koineisation of modern Arabic dialects

Different views have been proposed regarding the origin(s) of modern Arabic dialects. Versteegh (1984, 2001), for example, believes that before and in the early stages of the Islamic conquests, which started soon after the death of the Prophet in 632, there was a homogeneous- type of Arabic used by the people of Arabia, and which was labelled as Old Arabic. Versteegh claims that

"Old Arabic represents the type of Arabic that in its codified form by the grammarians became the literary and cultural language of the Arabo-Islamic empire and is usually called Classical Arabic."

(Versteegh 2001: 98)

Then, during the Islamic conquests and due to waves of migration by the native Arabic speakers of the Arabian Peninsula which resulted in contact with non-Arab speakers, a corrupted colloquial type of Arabic emerged. This type of Arabic became known as New Arabic, and from which the modern Arabic dialects developed. Thus, according to Versteegh, the dialects are the outcome of the Islamic conquests and are recent developments from Classical Arabic.

The assumption that modern Arabic dialects are descendants of Classical Arabic has been refuted by many linguists. One of these is Ferguson (1959), who claims that modern Arabic dialects are not descendants of Classical Arabic, but rather are linguistic developments from a form of Arabic that could be called the koiné. According to Ferguson, this koiné, from which the modern sedentary urban dialects developed, mainly evolved in urban centres and in the armies outside the Arabian Peninsula with the spread of "urban Arabo-Isalmic culture" (Ferguson 1959:618). He also specifies that "modern Bedouin dialects are not descended directly from the koine" (Ferguson ibid: 618). Only the sedentary dialects were the descendants of that koiné as was also backed up by Miller, who states:

"... these early urban dialects are characterised by a number of features associated with koineisation, simplification and innovation as opposed to Bedouin dialects considered as more conservative."

(Miller 2004: 179)

This koiné is significantly different from Classical Arabic which remained unchanged or rather, untouched throughout history as it is not the mother tongue of any native Arabic speaker. To prove this hypothesis, Ferguson (ibid) investigated the sharing of fourteen linguistic features among modern dialects proving that the koiné was the common source of modern Arabic dialects and not Classical Arabic. Three of the most significant, are explained below³⁰:

• Loss of the dual: all modern urban dialects have lost dual forms of adjectives, pronouns, and verbs while the use and retention of dual nouns shows variation from

³⁰For more examples of the koiné thesis, see Ferguson 1959: 620- 630.

one dialect to another. Moreover, when a dual noun is used, it has to agree with the plural form as in urban Medini Arabic, *?al-binte:n s^cuya:r* 'the two girls are small', whilst in Classical Arabic the concord system must agree with the dual as in *?al-binta:ni s^cayi:rata:ni*. Here the adjective agrees in number, gender and case with the preceding dual.

- The substitution of *i* for *a* in some inflectional affixes, e.g. *jaftaħu* becomes *jiftaħ*; this was shown as one of the distinguishing features between BMA where *ja* is used in the imperfect and UMA in which *ji* is used. See sections A.2.8.2.1 and B.2.8.2.1
- The merger of d^{ς} and δ^{ς} in the koiné. In the contemporary dialects developed from this koiné outside the Arabian Peninsula, there are no "phonetically independent reflexes of these two phonemes" (Ferguson 1959:630), while in Classical Arabic the two representations: d^{ς} and δ^{ς} still exist. According to the description of medieval grammarians, today's classical d^{ς} was not realised as an emphatic stop but as a lateral interdental (see Sibawyhi 1988) symbolised in IPA as f_{ς} ; this realisation appeared in Alqahtani's data (2015) in Tihāmat Qaḥtān as we shall see shortly. Today, modern dialects are divided into two types: dialects which maintain the interdentals and dialects which have lost the interdentals, but there is only one reflex for these two phonemes; interdental dialects use $\langle \delta^{\varsigma} \rangle$ whereas non-interdental dialects use $\langle d^{\varsigma} \rangle$ in the same phonetic environments (see Al-Wer's analysis (2004) in § B.2.1.1). All of these arguments indicate that the merger between $\delta^{\varsigma}a$:? and $d^{\varsigma}a$:? had occurred in the koine prior to the loss of the interdentals and thus the separation between the two families of dialects occurred.

Such shared features among modern dialects are significant indications that these dialects are the offspring of a koine which is regarded as a distinct entity from Classical Arabic (Ferguson 1959).

Ferguson's theory has been found to be largely speculative by subsequent research which has rendered his claims more or less obsolete. Holes (forthcoming 2017/2018), for instance, justifies that because of the scarce sources of reliable linguistic evidence, the history and origin of Arabian dialects is obscure. Classical Arabic, which was based on the Qur'ān and pre-Islamic poetry, does not reflect ancient spoken dialects. In fact, CLA was the product of 8th century grammarians, who give us only marginal information 'peculiarities' about the original Arabian dialects of certain tribes that were used in pre-Islamic and early Islamic times. Furthermore, the geographical distributions of these peculiar linguistic features shared by Arabian dialects and which remained immune to the effect of codified CLA, imply that these dialects had existed before the codification of CLA. As for the claim that urban dialects came into existence only during the Islamic conquests and thus are more recent developments than the Bedouin dialects, late antiquity of the Greek and Roman historians revealed that some of them were not. Ancient inscriptions showed that urban dialects were spoken in places like Yathrib (Medina) and in settlements in Syria and Lebanon. So, based on these arguments, dialectal variation must have been an ancient mechanism and not a recent outcome of the Islamic conquests.

At a later point in time, from the 14th to the early 20th century, the expansion of Arabisation resulted in two scenarios: firstly, the Bedouinisation of major urban dialects, which later developed into dominant koineised Bedouin varieties, spoken in Iraq, North Africa and Bahrain, and secondly, the levelling of urban dialects without major alterations or reclassification due to the migrants' dialects being sedentary and rural which closely resemble the urban features and not the Bedouin ones (Miller 2004), e.g. Cairo Arabic and Damascus Arabic. These two patterns are reflected in some of the contemporary sociolinguistic situations involving processes of accommodation, levelling and koineisation in the Arab world. These situations can be listed based on Miller's (2004: 189-191) categorisation as follows:

- a) In capital cities such as Cairo, Damascus and Casablanca where a dominant prestigious urban dialect is used, the dialect in question is immune to changes caused by migration and urbanisation
- b) In capital cities such as Algiers or Beirut which are affected by recent and radical demographic and political transformations (due to colonisation or war), the impact of migration is debatable as to whether migrants will adopt the local urban dialect, stick to their own dialect or promote the formation of a new koine dialect
- c) In old urban centres such as Fes, Rabat or Tunis which are affected by out-migration of the urban elite and significant population displacements, the new immigrants are not motivated to acquire the dialect of the host community. Instead, they and even the remaining urban residents adopt a regional urban koiné. This might be what is currently taking place in Medina, which has witnessed a massive influx of Bedouin immigrants who now reside alongside the original urban dwellers and could be involved in the koineisation process (more explanation will be given in the data chapters).
- d) In emerging new cities like Amman, the different dialects in the mixing play a role in the formation of a new urban koiné (more details will be given in the following section on Al-Wer 2002; 2003; 2007).
- e) In Arab cities with non-Arab immigrants who settle permanently like in Khartoum, or in the Gulf cities where immigrants live temporarily for particular purposes, e.g Indian construction workers, more research is needed to assess the impact of such migration on the local varieties being used.

3.4 Contemporary koineisation in Arabic-speaking communities

In Amman, Jordan

In a similar vein to the Milton Keynes Project, Al-Wer (1987; 2002; 2003 and 2007) carried out research in Jordan, called 'the Amman project'. The city of Amman was established relatively recently as the capital of Jordan and it is characterized as not possessing a traditional dialect or native population historically. It then became the destination of migrant groups from Jordan and Palestine in a sequence of successive waves. Since then, Amman has grown politically, socially and linguistically into Jordan's bustling metropolis. Consequently, the potential for new dialect formation is present because of the regular contact among migrants from different dialectal backgrounds involving no more than three generations. In the early period of settlement, the Amman population was made up of internal migrants (from various parts of Jordan) and of urban families of "intellectual and politicial elites" (Al-Wer 2007:60) from Palestine and some from Syria, fleeing the turbulent situations there at the time. From the Jordanian side, migrants mainly came from Sult in the central region and Kerak in the south. At this stage of new dialect formation, the Jordanians were motivated to converge to the linguistic behaviour of urban Palestinians and Syrians and thus "the salient urban Levantine linguistic features ... were advanced in Amman in the early stage" (Al-Wer 2007:60). Other waves of migration occurred after 1948 and 1967 but this time the main stream of migration from Palestine was rural; however, in the formation of the new Ammani dialect, none of the rural Palestinian linguistic features seem to play a role. Subsequently, during the 1970s and 80s the modernisation process involved major military and political reshuffles in that more of the high-ranking posts were assigned to the indigenous Jordanian population. At that point, localised Jordanian dialectal features commenced to have a social

meaning and be a factor in the koineisation process to the extent that even urban Palestinians were converging to the Jordanian dialects associated with political influence and power.

Al-Wer's accumulative research traced the koineisation processes and the formation of a new dialect across three generations in Amman. The adult migrants' speech of the first generation showed that localised linguistic features were levelled out, e.g. from the Jordanian side, affrication of /k/ in front vowel environment, and from the Palestinian side raised realisations of /a/. The second generation's speech is marked by extreme variability with gender as well as dialectal heritage governing the linguistic behaviour; the Jordanian men and the Palestinian women were the most conservative whereas the Jordanian women and Palestinian men were the innovators. For example, Jordanian women adopted the Palestinian glottal stop in place of the Jordanian [g] but did not converge to the Palestinian vocalic features. With the third generation, a local/regional Ammani identity began to emerge and the linguistic features began to acquire stability and social meanings. For instance, Al-Wer (2003) found that the use of the 2nd person plural pronominal suffix – *kum*, in place of Jordanian – *ku* and Palestinian – *kon*, was focused in the speech of the 3rd generation regardless of their dialectal heritage. She ascribed the emergence of this form to two principles of koineisation: markedness and simplification.³¹

Gender played a decisive role in the formation of the new dialect according to Al-Wer (ibid). After the indigenous male Jordanians were included in the decision making of the modernisation process, the use of Jordanian linguistic features became intensified and gained a distinct social meaning related to high ranking political jobs. By contrast, the women's workplace (education and social services) favoured the use of pan-Levantine urban linguistic forms, e.g. the use of the urban variant [?] among Jordanian women was favoured. However,

³¹ See Al-Wer 2003: 8-11, section on explanation: markedness and simplification

both Jordanian and Palestinian men were found to use the variant [g] (variably). In the case of Amman, origin, gender, generation, and socio-political change are the main factors that have influenced the formation of this dialect.

In Algeria

Zohra (2014) conducted a dialect-contact sociolinguistic study in Oran, considered to be the second largest urban metropolis in Algeria, to investigate koineisation among young university speakers in this speech community. Genealogically, Oran dialect is recognised as a Bedouin type variety; however, successive waves of in- and out-migration by pre-Hilalian (sedentary) and Hilalian (Bedouin) speakers influenced the dialect, and therefore, a number of the koineisation processes were initiated. A total of 176 informants aged between 19 and 27 years old participated in the study. Data collection consisted of sociolinguistic interviews, a questionnaire and participant observation. Analyses of the data revealed that koineisation processes took place at the phonological, grammar, and lexical level in the Oran dialect.

Koineisation processes such as mixing, levelling, interdialect formation and reallocation have been revealed at the phonological level. For instance, the phonological system of the Bedouin phoneme /g/ in Oran dialect has gone through several koineisation processes. First, the alternation between the sedentary variants [q] and [?] as well as the Bedouin variant [g] is an illustration of a mixing phase. Second, a case of reallocation was shown between [q] and [g] variants, both of which survived the levelling process but were reallocated a new socio-stylistic role. Zohra clarifies that

"... [q] is re-ascribed to formal situations while [g] is reassigned informal functions."

(Zohra 2014: 132)

Thus, the use of [q] versus [g] is contextually determined.

Regarding other variables (the interdentals), interdialect formation was attested with respect to the Bedouin voiceless interdental $/\theta$ / and the emphatic interdental fricative $/\delta^{c}$ /. According to Zohra (ibid), the contact between the Bedouin [θ] and the old Maghrebi (pre-Hilali) sedentary affricated dental [t^{s}] resulted in the interdialectal development [t]. In addition, the researcher commented that

"... the interdental sibilant is associated with bedouinity in contrast with the affricate which is considered too sedentary. However, the interdialectal dental plosive is seen as more neutral (than sedentary) and accepted in the pronunciation system of the speech community."

(Zohra 2014: 142)

Concerning $/\delta^{\varsigma}/$, the same researcher stated that

"... the ancient Bedouin emphatic lateral fricative ض has totally disappeared from contemporary Arabic varieties, leaving its place to other sounds."

(Zohra 2014: 143)

In fact, this confirmation cannot totally be accepted if we consider the contemporary dialects in which this archaic lateral fricative /b/ is still spoken in the south of the Arabian Peninsula as was found by Alqahtani (2015) and al-Azraqi (2007; 2010). As far as the Oran dialect is concerned, /b/ has disappeared and was substituted with the emphatic interdental fricative / δ^c / by the Bedouin speakers, while in the sedentary dialects the plain dental plosive [d] is used as in bodra 'vegetables' (Boucherit 2002 as cited in Zohra 2014: 143). In her discussion of this sound, Zohra (2014) writes that

"Neither the above Bedouin nor sedentary features characterise ORD³². Another segment [d] develops interdialectally out of merger of the plain dental plosive and emphatic interdental fricative."

(Zohra 2014: 143)

Focusing, when one variant becomes the established norm, has been discernible with respect to the variable (d3). In modern Arabic dialects, it can be realised as [d3], [3], [j], [g],

³² ORD stands for Oran dialect

among others. According to Zohra, [3] is known to be the reflex of all the current variants of $(d_3)^{33}$. In Western Arabic dialects such as the Algerian varieties, the velar stop [g] is used in the vicinity of sibilants as in words like *gazza:r* 'butcher', the affricated [dʒ] is the norm in Maghrebi pre-Hilāli dialects and the fricative [3] is used in Hilāli Bedouin dialects. In Oran dialect, [3], considered to be the Bedouin pronunciation, is focused in the following environments: 1) in initial syllable position: followed by a vowel, before a consonant or after a consonant as in *3i:ha* 'side', *3ma*\$a 'group' and *r3a:l* 'men', respectively. 2) [3] is also focused in final-syllable positions as in *tal3* 'ice' and 3) intervocally as in *ha:3a* 'thing'. The focusing of [3] which has now reached stability suggests the genealogical affiliation of Oran dialect with Bedouin features.

Within the grammatical framework, several examples are provided to assess the impact of dialect contact-induced koineisation on Oran variety. The levelling of the Bedouin demonstrative pronouns hada, hadi and hadu and their substitution with the sedentary neutralised demonstrative pronoun had 'this', used invariably without showing number or gender distinction, is an example of levelling and simplification towards sedentarisation.

Regarding the lexicon, undergoing koineisation processes, the researcher investigated the use of a number of lexical items from different speheres among Oran dialect speakers. An example of this is the alternation between the Bedouin-type [$rg \partial d$] and the sedentary-type [$n \Im \alpha s$] 'sleep'; both variants survived the levelling process but they were semantically reallocated new roles. The Bedouin variant [$rg \partial d$] maintains the meaning of sleep whereas the sedentary [$n \Im \alpha s$] has lost the old meaning and acquired the new meaning of feeling sleepy. A number of lexical items, however, have been levelled out resulting in the focusing

³³The diachronic development and origin of dgi:m will be discussed in more detail in the chapter on the (dg) variable

of their counterparts, e.g. the Bedouin variant $[d\alpha : r]$ has been focused whilst [fmal] 'do', the sedentary variant has been levelled out.

To sum up, although Oran dialect has experienced changes towards sedentarisation via koineisation processes, it is still viewed as genealogically affiliated to the Bedouin family.

In Saudi Arabia

Al-Essa (2008) investigated the impact of urban Higāzi dialect on the use of certain dialectal Najdi features by interviewing 61 Najdi female and male speakers. She compared the linguistic behaviour of three Najdi generations who had settled in Jeddah permanently. Different linguistic variables were analysed; namely, the use of the fricative interdentals, affrication of /q/ and /k/ in the stem, the use of the 2^{nd} singular feminine suffix - *ik*, the 3^{rd} person singular masculine suffix - *ih*, the plural feminine suffix - *in*, the masculine plural perfective suffix - aw and the plural suffix of the imperfect verb - $u:n^{34}$. Quantitatively, Al-Essa (ibid) correlated the use of these linguistic variables across three social factors: age, gender and contact. She came to the conclusion that Najdi speakers behaved in two different ways with respect to their trajectory of dialect accommodation towards the urban Higāzi variety. First, Najdi speakers in Jeddah predominantly used the interdentals instead of the urban stops because interdentals are peculiar to the Najdi variety and function as social markers to signal their ethnic identity. In contrast, the pattern of change of the morphophonemic variables was reversed in that the Najdi marked variants were shown to be substituted by the urban Hiğāzi regional unmarked variants. Different processes of koineisation such as levelling, interdialect formation and simplification were manifested in the behaviour of Najdi speakers during accommodation. Two examples of levelling are: the loss of the affricated variants [ts] and [dz] and their replacement by the velar stops [k] and

³⁴See Al-Essa 2008:143-237

[g], and the abandonment of the masculine plural perfective suffix - *aw* as in *ktibaw* in favour of the urban Hiğāzi suffix - *u* as in *katabu* 'they wrote'. The extended use of the feminine suffix - *ki* in post consonantal positions as in *maktabki* 'your office' is an example of interdialect formation, which does not appear in any of the input dialects. The loss of gender distinction of the plural feminine suffix - *in* as in *jaktibin* 'they are writing' and its substitution by the masculine suffix - *u:n* is another outcome of levelling and simplification towards the urban variety in which gender is neutralised.

Alqahtani (2015) conducted a sociolinguistic study to assess variation and change in the use of two ancient linguistic features of the Tihāmi Qaḥṭāni dialect, spoken in the region of 'Asīr in the southwest of Saudi Arabia. These were the sound $d\bar{a}d$ and the definite article. The former has two realisations: 1) an archaic lateral realisation symbolised in IPA as $[a^{c}]$ and 2) the interdental $[\delta^{\varsigma}]$; the latter can be realised as the local traditional form m - or the more regional form *l* - as in "*l-madrasa*" vs. "*m-madrasa*" (Alqahtani 2015:200). Sociolinguistic interviews were collected from twenty-eight speakers whose data were analysed quantitatively with respect to three social factors: age, gender and locality. Thus participants were divided into two age groups: young and old, two gender groups: male and female and two locality groups: Al-Farša, in the lowlands, and Al-Jawwa, in the highlands. Al-Farša is considered to be more conservative than the other community which is regarded as the urban centre of Tihāmat Qahtān. As for the phonological variable $d\bar{a}d$, results showed that there is change in progress in favour of the innovative koineised form $[\delta^{c}]$ in both communities. However, for the morpho-phonological definite article variable, change towards the incoming supra-local l - variant was only attested in the lowlands. Interestingly, these changes were led by the young female speakers.

In progress, more research is being undertaken by Al-Ammar, who is investigating language variation and use in Hā'il dialect, and Al-aodini, assessing variation in Dosari

dialect. They have both found that the localised features of these dialects are in recession and that there is an increase in the use of more regional koinesied forms.

3.5 Conclusion

The aim of this chapter is to conceptualise the language change currently taking palce in Medina speech community by reviewing the literature on the processes and stages involved in koineisation, one of the language-induced changes possible in dialect contact situations worldwide. The main national dialects in the mixing in SA can be divided genealogically into the Bedouin Najdi variety and the urban Hiğāzi variety. Medina, where the urban variety is predominant, is the perfect example of what is actually happening nationally. After the mass settlement of tribal immigrants, the Bedouin dialect, a linguistic sub-system of the Najdi variety, has come into daily contact with the host urban Medini dialect. The reign of King Faisal (1964-1975) brought about the first wave of Bedouin adult migration, which could be referred to as the first generation; their children are the second generation born within a dialect contact situation followed by their grandchildren classified as the third generation. Consequently, variation and change is being witnessed in the linguistic behaviour of both communities. Many questions are raised by linguists regarding the type, the impact, and the direction of language change. As we have seen in this chapter on koineisation, numerous factors impact linguistic change. Firstly, urban Jeddah Arabic has become the regional or standard dialect of northern Higāz to which other dialects might converge or diverge and Medini Arabic is no exception. Secondly, what is intriguing about this contact situation is that we have first-hand observation of the formation of a potential koiné. Koineisation in Medina does not need to be thought of as 'a fait accompli' but rather as 'a dynamic and complex process that can be investigated as it takes place' (Kerswill 2000:67). Finally, the number of the new immigrants compared to the original community, their contact with their place of

origin and the nature and sphere of contact they have with the speakers of the urban variety, are typical instances of influenicing aspects. All of these circumstances shape the dialect contact-induced change.

Chapter Four

Methodology

The data are the essential ingredient in sociolinguistic research. More specifically, the data in sociolinguistic studies of language variation and change can be described as a corpus of samples of natural speech. Thus, many factors and challenges have to be taken into consideration before tackling and embarking on any variationist study. When starting on such a project, the first steps to be taken include specifiying the dialect to be investigated and ensuring the most practical way of gaining access to the native speakers of that dialect. Successful execution of these initial steps has implications for the research as a whole. Since my objective is to examine linguistic variation and change in the dialect currently spoken in Medina, data collection from natural spontaneous speech was my ultimate goal. Having decided upon the locality of the study, which is my hometown, Medina, it was of equal importance to determine the factors that would guarantee a careful and objective selection of speakers in line with my criteria. My priority was to obtain a representative sample of data.

Whilst planning my study, defining the actual speech community of my research was by no means an easy task as there are a number of ways in which the community could be conceptualised. For example, it could be viewed as a geographical area, or as a group of people who might be living in different locations but sharing the same variety; or indeed both conditions. Several scholars have attempted to define the notion of speech community; however, researchers have a difference of opinion of this concept in sociolinguistics (see Patrick (2004), who reviewed the concept of speech community by tracing its development and application and by pointing out its problematic areas). Labov (1972), for example, defined speech community by considering language variation and change as follows, "The speech community is not defined by any marked agreement in the use of language elements, so much as by participation in a set of shared norms. These norms may be observed in overt types of evaluative behaviour, and by the uniformity of abstract patterns of variation which are invariant in respect to particular levels of usage."

(Labov 1972: 120-121)

Labov's (1972) definition underpins the principle that language variation is constrained by social factors such as age, gender, social class, social group and so on and that speakers of the same speech community have social competence to use sociolinguistic variables accordingly.

Building upon the idea of *shared norms* (common reactions and attitudes) and including the notion of social networks (social bonds), Montgomery (2008) said that speech community:

"As an idealized notion it refers to a group of people who share: (1) a language in common; (2) common ways of using language; (3) common reactions and attitudes to language; and (4) common social bonds (i.e. they tend to interact with each other or tend to be linked at least by some form of social organization)."

(Montgomery2008: 201)

Therefore, based on these definitions I considered the city of Medina as a single speech community which comprises diverse social groups speaking different yet mutually intelligible varieties. Two of the major dialect-types, the urban and the Bedouin, are in constant contact with each other for economic, professional, educational and social purposes. This study seeks to uncover and evaluate the language change and variation, the effect of these changes and any linguistic innovations that may result from this dialect contact situation. Collecting a representative sample from both varieties has been of considerable significance and involved a lot of careful planning. The objective of this chapter is to describe the methodology used to collect the data. Section 4.1 presents the planning stage which involves the sampling method, the most prominent social factors, the guidelines of the sociolinguistic interview, the sample design and ethics. Section 4.2 gives information about the fieldwork including the position of

the researcher in the community, time, and location of the sociolinguistic interview. Finally, in section 4.3 the linguistic (dependent) variables under study are introduced.

4.1 The planning stage

I planned this stage before going on the fieldwork trip and at this stage I had to decide on the sampling method, the social factors, the structure of the socialinguistic interview, the sample design and ethics. These will be explained in the subsections below.

4.1.1 The sampling method

Data collection in the form of natural speech is of critical importance to the reliability of any sociolinguistic research. Consequently, knowledge of the fundamental principles and methods to be used in the selection or sampling of informants has to be considered and justified in accordance with the community under investigation. There are a number of different methods for the selection of speakers, two of which are random sampling and judgment sampling. According to Hoffman (2014) the motive behind random sampling is to ensure to a certain extent that all speakers have an equal chance to be selected as participants from a population which is "restricted somewhat by criteria such as neighborhood" (Hoffman 2014: 31). Such criteria list the population of any speech community objectively and without any biased orientations. For example, the investigator can choose participants from sources 'sample frames' like telephone directories or electoral registers. The main purpose of random sampling is to ensure representativeness through avoidance of bias. Although this method has been successful in some cases, it has proved to be problematic in other situations, for several reasons. First, for pragmatic and practical reasons sociolinguistic studies use small samples of participants and the use of the random method does not necessarily guarantee that the sample is representative of the whole speech community; for example, approaching speakers of a sample frame can be biased against or in favour of certain social criteria. Second, in highly

diverse and stratified speech communities such as the one in Medina, it is difficult to succeed in reaching a stratified sample that projects the social structure of the society under study and can achieve the aim of the project (Milroy and Gordon 2003). Each of these two methods: random and judgment sampling has its own advantages and disadvantages. However, quantitative sociolinguistic researchers currently prefer to use 'judgment sampling' also known as 'quota sampling' (Milroy and Gordon 2003: 30).

In judgement sampling the number and the social categories of speakers are predetermined. This method requires that the researcher has an extensive and detailed view and knowledge of the community which is being researched. In this study, I decided to use judgment sampling to select my speakers as it was the most appropriate to the goal of my project and the rationale for using this method is manifold. First, since Medina speech community is composed of two main social groups: the Bedouin and the urban speakers, and each of whom speak their own distinct dialect, the judgment sampling was essential. Second, as a native to Medina I had no difficulty to define the speech community of the city into its main social constituents which are age, gender and social group. Third, I chose judgment sampling because in this way I could ensure more or less equal numbers of speakers in the cells, and ensure equal distribution of the different social groups under investigation in this study. Fourth, although I benefited from my acquaintance with the community, I was not completely objective when selecting my participants as I depended on my relatives. At times, when interviewing my relatives, they became tongue-tied during the interview until we find and discuss a particular topic for discussion that is not intimidating for them. Furthermore, it was not realistic for me to use random sampling and use sources like telephone directories or electoral registers because they can hardly be found in Saudi Arabia. Moreover, I depended on 'the friend of a friend' method usually used in judgment sampling as it is difficult or sometimes even impossible to approach people in Medina and ask them to be interviewed and recorded in public places such as coffee shops or communal and recreational facilities. After deciding on the samping method and since this study is the first sociolinguistic study to be carried out in that speech community, I chose age, gender, and community (social group) as the main prominent social factors that delineate Medina speech community.

4.1.2 The social (independent) factors

In this section, the social factors: age, gender and social group, considered in this research are explained with respect to sociolinguistic research in general and to the speech community under study.

4.1.2.1 Age

It goes without saying that age as a social factor has been shown to play a crucial role in determining and influencing all aspects of life, one being linguistic behaviour. Age is any living person's number of how long they have lived whereas aging is the natural process which corresponds and continues thoughout the stages of life. These stages are birth, childhood, adolescence, adulthood, middle age, old age and death. Under normal circumstances, as humans move though life stages they age and their sociolinguistic competence is subjected to a constant state of refinement and modification relevant to their age's needs and demands (Eckert 1997).

It is a matter of fact that aging is a natural and universal phenomenon but its implications are culturally determined (Eckert 1997). For example, people's' life stages and their assumed responsibilities in the Arab world are different from those in the Western world. As Milroy and Gordon pointed out:

"Age by itself has no explanatory value; it is only when examined in the context of its social significance as something reflecting differences in life experiences that it becomes a useful analytical construct."

(Milroy and Gordon 2003:39)

Methodologically, age when considered as a social factor can be approached from two perspectives: the apparent time and the real-time approaches (Tagliamonte 2012 and Milroy and Gordon 2003). Both approaches are based on Saussure's (1916) dichotomy between synchronic and diachronic linguistics. Synchronically, apparent time studies are based on the principle that speakers of different age groups represent different time periods. Thus, inferences can be drawn about the patterns and development of language variation and change through time from a snapshot obtained from the present. The following summary gives two interpretations of results that can be made using apparent time:

• Change in progess is also known as 'generational change'. Here an innovation of a language variant will eventually substitute the original one, particularly when used by young speakers, until the old variant becomes obsolete and is permanently replaced by the new form by the whole community. This change can be represented in an S-curve diagram adapted from Tagliamonte (2012: 44):

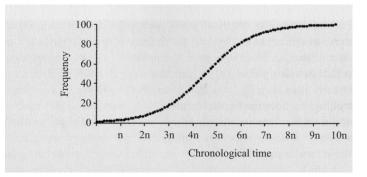


Figure 4.1: Representation of generational change (source: Tagliamonte 2012: 44)

• Age grading occurs when a new variant is temporarily used by a specific age cohort but makes a complete return to the orginal variant when it is no longer appropriate to the user. Tagliamonte explained that in age grading "... there is no ongoing linguistic change of the grammar of the language, but rather change is localised to the behavior of a certain age group."

(Tagliamonte 2012:47)

The typical pattern represting this age-graded change is a u- or v- shaped curve which Al-Hawamdeh's (2016) data revealed with respect to the palatalisation of the (k) variable, as given below:

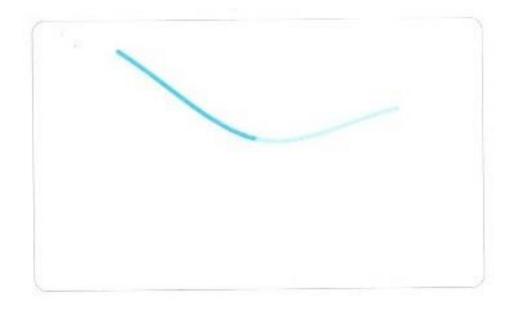


Figure 4.2: Representation of age grading change showing the use of variant [<code>f</code>] by age groups (source: Al-Hawamdeh 2016:109)

Al- Hawamdeh (2016) found that the old and young generations used the traditional palatalised variant $[t_{f}]$ more than the middle-aged group and so she concluded that the variable was not undergoing change but was in stable variation.

Diachronically, a real-time study can be achieved if the research of any apparent time study is replicated at a future date; the results of both works are compared and then they are either confirmed or refuted. Such studies are referred to as real-time studies and are classified into 'trend studies' and 'panel studies'. Tagilamonte said that

"Trend studies involve resampling the same age range of speakers with similar social attributes in the same speech community at different points in time."

Tagilamonte (2012: 53)

Trend studies have been conducted by a number of researchers such as Labov in Martha's Vineyard in 1962 which was then restudied by Blake & Josey in 2003; Trudgill first did research in Norwich in 1968 and then later in1983; Al-Wer studied language variation and change in the town of Sult in Jordan in 1991 and later in 2004, among others.

Panel studies are also referred to as 'longitudinal studies' which are not often found in the research and literature of sociolinguistics because they are less practical to do as they require the same informants to be reinterviewed after a relatively long period of time. One of these studies is the Cardiff study conducted by Mees and Collins who collected data from the same subjects aged 10 in 1976, 15 in1981 and 24 in1990 to investigate glottalisation; in this way they were able to compare the language behaviour of the participants at different stages of their lives: childhood, adolescence and adulthood (reported in Milroy and Gordon 2003: 38).

Age division in the current study

There is no single method on how to divide age in a variationist study; it is up to the researchers who usually possess a strong local knowledge of the background and history of the location of their research and thus they can make decisions about the distribution of age groups based on this knowledge (Macaulay 2009). In this study, I divided age into four groups for both urban and Bedouin communities: young (18-29), adult (30-44), middle-aged (45-59) and old (over 60 years old). Concerning the oldest urban age group, gender distinction is marked by the fact that old urban male speakers were more educated and involved in jobs such as governmental positions and public services, leading a professional life outside their intimate social networks, more than the old urban female speakers. The old urban male group had wider contact with people from different dialectal backgrounds whereas urban women of this age group were not educated and their role was confined to the house and its chores. The old urban group is mainly made up of returnees who, after having

lived most of their professional lives in big cities such as Riyadh, Dammam and predominantly Jeddah, returned to Medina to build their own houses to enjoy the slow and relaxed pace of life there. Medina has a high percentage of old urban inhabitants, who when young and active in the job market emigrated from Medina to seek better job opportunities in larger cities. As far as the lingusitc behaviour of this group is concerned, this group of speakers would have left Medina as adults and would have returned to their native city after retirement. Based on my data I could assume that short-term or partial accommodation could have taken place but when they returned to Medina their local linguistic features reappeared and there was no motivation for them to change their linguistic behaviour consciously. For example, the use of the interdentals is absent when they communicate with speakers from their own community but they might use these sounds when engaging in conversations with speakers of other dialectal backgrounds. On the other hand, the old women speakers are usually the most conservative in preserving the localized features and my data also confirmed this. Regarding the Bedouin community, the oldest age group consists of the adult immigrants who left their hometown, al-Hinākijja, to settle permanently in Medina. With this age group, dialect contact between the speakers is very limited and only happens occasionally if ever, especially with the oldest female speakers.

With the middle-aged group cirumstances have changed overwhelmingly over the past fifty years in that Medina has developed socially and economically in many ways. Education has become more widespread with the creation of public schools and two universities: the Islamic University and King Abdul Aziz University, a satellite of King Abdul Aziz University in Jeddah. Health care has also improved due to the construction of a number of hospitals and medical centres. The establishment of governmental buildings and the construction of international hotels around the Prophet's Mosque has led to the creation of more job opportunities. These factors encouraged Medinis to stay and work in their native city. Consequently, dialect contact between the two Medini communities, urban and Bedouin, started to be observable mainly in formal contexts such as in the work place, e.g. hospitals, educational institutions, banks, and administration. Another type of dialect contact also occurred between the people of Medina and the expatriates who came to fill these jobs from urban centres in countries like Egypt, the Sudan, Syria, Jordan, Lebanon and so on. The contact happens more between male speakers than females as men of this age group are still the main breadwinners in many Arab countries; therefore, they have more contact with the outside world experiencing different social and dialectal environments. This is the first generation of the Bedouin community to be born in Medina.

Contact is more apparent with the adult age speakers who have established wider social networks because the availability of education has increased the job prospects for both communities. This age group has extended contact not only inside but also outside Medina as their jobs sometimes require them to travel further afield and hence interact with speakers from different backgrounds. As in other countries, the demands and needs of a developing and expensive urban lifestyle have forced both Medini men and women out to work in order to earn a living. All of these factors have led to extended contact not only in the work place but also in more informal situations where natural friendships are likely to emerge. With the second Bedouin generation, cultural barriers are diminishing and mutual respect and understanding between the two social groups is being built up.

Speakers from the youngest age group are in their final years of schooling and many are studying at university so they have been encountering dialect contact on a regular basis with all communities living in Medina. To seek more advanced education, some students choose to relocate to the larger universities in large cities like Jeddah where they will experience wider contact with the local communities, which are more diverse and multicultural. In addition, the launch of the King Abdullah Scholarship Programme in 2005, encouraged students to study abroad where they would come into contact with culturally diverse lifestyles including different Arabic dialects such as Jordanian Arabic, Cairo Arabic, etc. As a consequence, they become more in tune with the outside world enabling them to accommodate more easily to change, including language. Some of my interviewees having experienced education in large urban Arab cities or even in western universities are now back working in Medina where the exchange and mixing of newly acquired dialects is intensified.

4.1.2.2 Gender

Gender should be approached holistically to include both the sociocultural and symbolic values in order to be a valid and reliable sociolinguistic variable and not be limited just to the biological category: male versus female. It has been proved that gender has the potential to either motivate or hinder linguistic changes in certain contexts. This means that each single person has the ability to manipulate language and use the variations to symbolically reflect gender identity, ideologies and attitudes (Cameron 2003). Eckert (1998) believes that gender should be viewed as a range between two reference points: masculine vs. feminine, from where speakers can place themselves socially either in a conscious or subconscious manner. For example, if a woman worked in a very male environment, she would accommodate her language to be similar to the speech of her male colleagues in order to be accepted.

The ever-changing interpretation and justification of gender-based differentiations are largely determined by the beliefs, values, morals and standards of the community concerned. Consequently, this can lead to a contradiction between societies as each society has its own religious, political and cultural ideologies. Timing is of significance in the conceptualisation of gender-differentiated patterns. In the past, it was a universal reality that a woman's place was in the home while the man's place was to provide for the family by finding work in the outside world which would result in more dialect contact. Currently, the situation has changed and the number of women working outside the home is on the increase. One of the most important findings in sociolinguisitcs is that women have had a pioneering and dynamic role in language change usually towards the standard or prestigious variants. This linguistic reality is paradoxical and requires explanation of the reasons why women tend to use the standard language more than men do within the boundaries of the community under investigation (Romaine 2003:103).

Indeed, Labov explained this contradiction using his principles 2, 3 and 4 which he named "the gender paradox" (2001:292). Labov classified language change into three types of change: "stable sociolinguistic variables, change from above, or change from below" (2001:263). Stable sociolinguistic variables are those that show stability or patterning in their variation, but do not exhibit change in progress. These variables have been around for generations and thus predictions of their effect on language behaviour can be made (Labov 2001; Tagliamonte 2012, inter alia). Change from above refers to a change that occurs consciously in which speakers can easily divide the linguistic variants into standard (prestigious) or non-standard (stigmatized) forms and intentionally make a choice between them. Therefore, this change is socially motivated. More importantly, this change relies on the linguistic 'imports' from outside the speech community (see Labov 2001; Tagliamonte 2012; Meyerhoff 2011; Holmes 2013). Finally, change from below occurs unconsciously and as it is mainly linguistically motivated, it is below the speaker's level of conscious awareness and knowledge and it develops within the borders of the same speech community (Labov 2001; Tagliamonte 2012; Meyerhoff 2011; Holmes 2013). The impact of gender on these three types of changes were explained by Labov (2001) with respect to three principles.

In empirical terms, several variationist studies have confirmed evidence for "Principle 2" known as "the linguistic conformity of women", which means that "... for stable sociolinguistic variables, women show a lower rate of stigmatized variants and a higher rate of prestige variants than men."

(Labov 2001:266)

In English, for example, the phonological variable (ing) is an evidence of a stable sociolinguistic variable where women were ahead of men in using the standard prestigious variant [ŋ] and not [n] in different varieties of English such as in New England (Fischer 1958), Norwich (Trudgill 1974), inter alia.

Concerning change from above, "Principle 3" states:

"... in linguistic change from above, women adopt prestige forms at a higher rate than men."

(Labov 2001:274)

It has also been found that language change from above is generally dependent on women's linguistic behavior. This was reported by Labov (1966) who concluded that in New York, change of the variable (r) in postvocalic positions towards consonantal [r] is led by women. Also, language shifts, which are according to Labov "conscious shifts and are always changes from above" (Labov 2001: 274), are usually steered by women. This is seen in a study conducted in a bilingual community, in Oberwat in Austria which was previously in Hungary. The young peasant women rebelled against their low status by making a conscious decision to switch from their native low Hungarian to the German high variety, in order to elevate their position to equal the working status of the German population (Gal 1978).

Finally, "Principle 4" states:

"... in linguistic change from below, women use higher frequencies of innovative forms than men do."

(Labov 2001:292)

Change from below was attested in several sociolinguistic studies and it is "the normal type of linguistic change" (Labov 2007: 346). For example, Wolf and Jiménez (1979) as reported in Labov (2001:282) researched the devoicing of /ʒ/ in Spanish in Buenos Aires and they found that the younger females were leading the change towards the devoiced variant.

Now, let us consider language variation and change in the Arab world. The early sociolinguistic literature on gender assumed that the linguistic patterns found in western contexts were in contradiction to those found in Arabic societies. It was believed that Arab men used more standard features than women did. Reinterpretations of the results were given by Ibrahim (1986), who explained that this misconception stems from the fact that Standard Arabic does not affect the trajectory of linguistic change as it is only confined to written and formal speech contexts and cannot be seen to play a part in Arabic vernaculars (see also Al-Wer 2014). Ibrahim (1986) states:

"Investigators of language variation according to speaker's sex in Arabic have misinterpreted their data because they wrongly assumed the standard H variety of Arabic to be the only highly valued variety of Arabic. Evidence from various sources and different Arab countries shows that spoken Arabic (L) has its own local prestigious varieties which always comprise certain features that are not only different from but are often stigmatized by H norms. All available data indicate that Arab women in speaking Arabic employ the locally prestigious features of L more than men. This is in perfect conformity with patterns of language use in other language communities investigated for sex differentiation and not contrary to such patterens."

(Ibrahim1986: 124)

Currently, the general view that women are more linguistically conscious than men and thus are usually the leaders and innovators of sound changes has been proved by several sociolinguistic researchers (Haeri 1994 and 1997; Al-Wer 2002, 2003 and 2007; Al-Essa 2008; Ismail 2008; Al-Qouz 2009; Al-Wer and Herin 2011; Alqahtani 2015; Abu Ain forthcoming; among many others).

To sum up, the impact of gender as a social factor on language change is best validated and only becomes meaningful if researched and interpreted within its community and sub-cultural norms.

The role of men and women in Medina

In the community of Medina, the social roles of men and women are distinct, each having their own responsibilities. Women are in charge of the house and the care and education of their children, to the extent that if a child behaves badly then it is the mother who is at fault and not the father. Men are the financial providers.

The roles of urban and Bedouin women in Medina are different as each social group has its own rules, customs, traditions and cultural backgrounds. As a whole, the urban women have more social power over the decisions that affect their lives and their families than Bedouin women. This is echoed in the discourse of a number of Bedouin women who I interviewed; Maha, for example, from the middle age group commented on the fact that urban men cannot take another wife as they are scared of their wives. Within the urban community, having more than one wife is frowned upon whilst it happens more in the Bedouin community. Another Bedouin woman, Nihāl, in her 20s, commented on the fact that she admires the way urban women can handle their business and financial affairs without the help of men. From personal experience, I interviwed my aunt who is in her sixties now and whose husband died at a young age. After the death of her husband, she decided to become financially independent and chose to work as a dressmaker. According to local urban norms, this was not acceptable especially by her male relatives and she had to fight for her economic independence. Although she encountered resentment and difficulties in leading the life she wanted, in the end she was allowed to and succeeded in her dress making career. The same situation in the Bedouin community would have been impossible.

In general, old urban women are housewives and any work they do is from their home; consequently, their geographical sphere is confined to the house. In contrast, before they immigrated to the city, Bedouin women used to work alongside their family members, farming and selling their produce in the markets, enabling them to have more contact with the outside world. Most of the old urban and Bedouin women are illiterate whereas men received an education ranging from basic to higher qualifications. Generally, the old urban men are more educated than their Bedouin counterparts and some, having been educated in larger and more developed cities like Cairo, Damascus and Beirut, have experienced wider dialect contact than the Bedouins.

In contrast, the roles of urban and Bedouin women from middle age to the youngest age group have become more similar as their conditions continue to improve. This is mainly due to the discovery of oil which has brought about urbanisation and modernisation as well as the spread of education all over Saudi Arabia particularly in the larger cities, one of which is Medina. Their time spent at school and universities as well as their involvement in the active life of work has increased their contact with the female speakers of other varieties. One should take into account that the physical separation between men and women outside the family is the norm in this society. Adult and young women nowadays have the opportunity to continue their education not only nationwide but also abroad especially at international western universities.

Men from all age groups have always had better prospects than women and have held senior positions in politics and in the government whereas women have been invisible until recently. In 2013, during the reign of King Abdullah, women were granted 30 seats out of 150 in Mağlis al-Šūra 'the Consultative Assembly', and in 2015 the municipal elections were open to female participants either as candidates or voters. However, in spite of all of these advancements women still have to be chauffeured by their male relatives or a male driver as they are not allowed to drive, which limits their independence and spontaneity.

4.1.2.3 The social group variable

In Medina, the two main social groups are the Bedouin and the urban groups with other smaller communities such as al-Naxāwla, al-Šanāqṭa, named after the city of Šinqīṭ 'Chinguetti' in Mauritania, and the non-Arab workers. The scope of this study is to assess variation across the Bedouin and the urban social groups. The reason behind this focus is that these are viewed as the mainstream communities which constitute the larger speech community of Medina. I assume that these two distinct groups will show varying patterns of usage of the linguistic variables under investigation.

Ethnic identity can be approached from different angles, such as common or shared cultural characteristics which entails a common/shared: history, religion, nationality, basic value orientations, language, etc. Barth states that ethnic boundaries are flexible and that "ethnic groups are seen as a form of social organisation" (Barth 1969: 13). Thus, the Bedouin

social group (BSG hereafter) can be regarded as a single and unique group with no outside influence as they share a common history, shared values and customs, and a distinct language variety. BSG are speakers from Bedouin descent, whose major tribe is the Harb tribe who were originally from the Qahtāni tribe in Yemen; therefore, tribal affiliation is a distinct feature of the Bedouin community. It is believed that clans of the Harb tribe migrated from Yemen to the north of the Arabian Peninsula after the destruction of Ma'rib Dam in Yemen. The Harb tribe and its clans including al-Ruhaili, al-Mezayni, al-Huğaiyli and al-Hāzmi among many others, used to live on the outskirts of Medina as tent dwellers living a nomadic or semi-nomadic life. They used to have an organised hierarchical governing system, in which the Šayx or Emir 'the tribal chief' was responsible for regulating almost all internal affairs of the tribe, but after the establishment of the Saudi Government the power of the Emirs diminished. After the discovery of oil, there was a radical transformation in the infrastructure of Saudi Arabia in all aspects and Bedouin settlement was encouraged causing massive waves of immigration into Medina. Another distinguishing characteristic of this particular group is the variety of language they use which is the Bedouin Medini dialect described in section A.2. Bedouin settlers in Medina started to lead a totally different lifestyle and became urbanised over time: living in urban style houses, going to school and having jobs and businesses inside the city. This brought about regular contact with the urban people of Medina and their language variety which I hypothesise to be the most significant reason for the mixing of dialectal varieties.

On the other hand, the urban social group (USG hereafter) do not have homogenous ethnic origins, listed as follows:

 The immigrants from non-Arab regions or countries such as Turkey, Russia, India, Central Europe, Afghanistan, etc. Some Medini families from these areas are Xāšogği, Dāģistāni, Bušnāg, 'Izmirli and Ṭarabzūni.

- The immigrants from Arab regions such as the Levant, Egypt, Yemen and North Africa. Aṣ-Ṣaʿīdi, ad- Dumyāṭi, al-Naḥḥās, and al-Lazgāni are examples of Medini families belonging to this sub-group.
- Al-'ašrāf families who are the descendants of the Prophet Mohammed.
 Some of these families are Go<u>t</u>, ar-Rufā'i, Gamal al-Lēl, Mišayyix, Hāšim and Ţāhir.

This USG came from different parts of the world and settled in Medina many centuries ago for different reasons whether religious, economic or political. This group used to have the powerful and top jobs giving them a substantial economic and social influence on Medini society. With the different languages/dialects of the immigrant-based community in the melting pot and after the succession of generations, the urban Medini Hiğāzi dialect was formed in this multi-cultural speech community. Their main unifying characteristic is that they all share the same locality, viz. Medina. This community has developed a common interest and a common sense of pride in being residents of this holy city and they are now known as 'ahl al-Madina', 'the people of Medina'.

Historically speaking, Medina has undergone successive waves of immigration leading to the creation of a stratified society formed of Bedouin and urban groups. First, Medina was inhabited by the immigrants of the USG, who were attracted to settle there to run businesses and trade around the Prophet's Mosque. They were more educated and financially stable than the Bedouin community and due to their diverse cultural backgrounds were more suited to setting up businesses to serve al-huğğāğ 'the annual pilgrims' coming from different regions. Centuries later Medina witnessed a second wave of immigration by speakers of the BSG and during their early days of settlement, they had blue collar jobs such as farm labourers or traders, and ran small-scale services. However, today's circumstances are different as both groups have equal opportunities for education, jobs, healthcare, and so on. It is worth mentioning that these days, the term 'Bedouin' is mainly used to refer to the dialect spoken by Bedouin speakers and not to the lifestyle they lead. More regular social and dialect contacts have developed between these newcomers and the established urban group through a shared workplace, neighbourhood and place of worship, the Prophet's Mosque.

Consequently, I assume that this situation of dialect contact may lead to different features of koinesation including mixing, levelling, or simplification which might occur at the same time in Medina speech community. It could be thus hypothesised that one of Miller's (2004) examples of the five Arabic urban dialects³⁵ that could develop due to migration applies to the case of the urban variety being in the process of koineisation and development in Medina speech community. Medina is an old urban center and has been subjected to outward and inward migration since its formation. In modern times, the young educated urban people tend to leave Medina in search of better job opportunities in larger cities such as Riyadh, Jeddah, and Dammam. Inward migration is mainly steered by the Bedouin community. Several sociolinguistic urban studies have been conducted to assess the transformation of dialects due to contact induced by migration and the renewed patterns of settlement in the Arab world. One of those research studies conducted by Al-Wer (2007:55) summarizes the possible outcomes of dialect contact as follows:

- The spread or diffusion of some already existing features or variants from one dialect to the other.
- The emergence or creation of intermediate in-between features in all of the affected dialects.
- The innovation of brand new linguistic features which were non-existent in any of the dialects.

³⁵See Section 3.3 in this thesis

Given the situation outlined above, it is clear that Medina has become a major urban settlement in Saudi Arabia comprising a heterogeneous assortment of communities or social groups: the Bedouin and the urban groups, are typical examples. Consequently, Medina speech community provides a breeding ground for dialect contact among different varieties and I have been intrigued to find out the impact of migration and population changes on the evolution of both dialects. Finally, not a single study has been conducted to describe the linguistic situation in Medina from a sociolinguistic perspective taking into account linguistic variations relating to gender, age, social origin, social class, sect, and education. Therefore, I took a pragmatic approach to carrying out this research by including these three most straightforward and salient social variables which are gender, age, and social group.

4.1.3 The design of the study

Taking the previous factors into consideration, I categorised informants into different groups. In my sample design, I planned to have three to four informants in each group; however, in my actual sample I had only 2 informants in the M2B sub-group. My actual sample is shown in table 4.1.

F1U	4	F2U	4	F3U	4	F4U	4
F1B	3	F2B	4	F3B	3	F4B	4
M1U	4	M2U	4	M3U	3	M4U	3
M1B	3	M2B	2	M3B	5	M4B	4

Table 4.1: Sample showing the social categories and numbers of informants

As stated in § 4.1.2, the social factors adopted in this study are age, social group and gender. Age was divided into four age groups: group 1 with speakers over 60 years old, group 2 with speakers between 45- 59, group 3 with speakers between 30- 44, and group 4 with speakers between 18- 29. Social group was divided into two categories; namely, U for urban or nontribal affiliation and B for Bedouin or tribal-affiliation. The last social parameter was gender and I used F for female and M for male speakers. To illustrate, the cell F1U comprises the urban female speakers whose age is 60 or above. A total number of fifty-eight informants participated in the study.

4.1.4 The sociolinguistic interview

The sociolinguistic interview is considered by all variationist sociolinguists as the principal tool to be used in data collection. To counterbalance the advantages and disadvantages of the alternative methods of data collection like the survey and participant observation techniques, the sociolinguistic interview was devised. The main advantage of this interview is that it allows the collection of large quantities of casual natural speech in a relatively short time. In the current study, each interview lasted a minimum of 40 minutes to a maximum of 120 minutes. Labov has emphasized that the goal of the interview is "to record with reasonable fidelity from one to two hours of speech from each speaker" (1984: 32). The aim of the variationist sociolinguist is to locate, establish and verify the usage of patterns of variation among speakers of a specific variety. Fluctuations and variations found in a more casual and less self-conscious linguistic style, known as the vernacular, have aroused considerable interest among variationist sociolinguists. Labov states:

"... the style which is most regular in its structure and in its relation to the evolution of language is the vernacular, in which the minimum attention is paid to speech."

(Labov 1972: 112)

Consequently, for the purpose of this study my principal aim was to gain access to the vernacular speech of Medini Arabic to answer my research questions.

In an attempt to gather high quality data as well as large volumes of relaxed and casual speech, I had to acquire and learn the basic and detailed knowledge necessary for the best approaches to interviewing participants. However, it is agreed that each tool or method used to gather data carries its own strengths and weaknesses and the sociolinguistic interview is no exception. Based on the literature of sociolinguistic methods that I had read, I relied on certain strategies to overcome the possible limitations of the sociolinguistic interview.

First of all, following the recommendations of variationist researchers, I viewed the interview as a social event (Labov 1984; Milroy 1997; Feagin 2013), at the start of which I was introduced by a friend and then welcomed as a guest by the participant. Furthermore, on most of the occasions I was accompanied by a 'friend of a friend' (Milroy and Gordon 2003:32) to the interviewee's home. By including this third person, it was possible to modify the structure of the one-to-one interview as was used by Labov (1972). This proved to be effective in remodelling the interview into a three-way conversation and hence generating natural informal speech. In contrast to the one-to-one interview, informants in these group sessions became more involved in the conversation by having a friend there rather than just the researcher (myself) who although an insider, is still a stranger.

Secondly, based on Labov's (1984) 'conversational networks', I structured the interviews into modules or sets of questions around specific topics appropriate and peculiar to Medina speech community. These modules included a list of topics sometimes formulated in the form of direct questions or on other occasions by just initiating a topic and asking for their opinions. I maintained a flexible approach to the selection of topics I chose, which depended on the informants' interest and eagerness to continue with the discussion. The following are example modules moving from general to more specific areas:

- 1. Personal information
 - Age
 - Marital status
 - Number of children

- 2. Social aspects
 - What are the different communities living in Medina?
 - Details on the integration and interaction between the different communities
 - How is Medina different from other communities in Saudi Arabia?
- 3. Religious celebrations
 - How do you celebrate Ramadān³⁶, 'īd³⁷, and Ḥaǧǧ³⁸, these days?
 - How did people use to celebrate these religious holidays in the past?
- 4. The Prophet's Mosque
 - What was life like when you were living in the neighborhood around the Prophet's Mosque?
 - Why/how is it different today?
- 5. Past memories
 - What was your school life like?
 - What games did you use to play as a child? How did you spend your free time?
 - How has the food changed over the years?
 - Their marriage customs and wedding celebrations

All questions and topics were tailored to the participants' age, gender and social group which constitute the social factors of this study. For instance, with older interviewees I had to play the role of the learner interested in finding out about local, social, historical and cultural aspects of their environment. I found that, as was advised by (Labov 1984: 40), putting

³⁶ The month of fasting

³⁷ The celebration after Ramadān

³⁸ The pilgrimage season

myself in a lower position than the interviewee I made them feel more comfortable and thus enthusiastic to impart their knowledge and experience. I used these strategies to ensure the collection of natural speech data and to minimize what Labov termed the 'observer's paradox' (Mesthrie, Swann, Deumert and Leap 2013:90).

4.1.5 Ethics

When research involves collecting data from human participants, researchers must make ethical considerations their first priority. For that reason and before starting the fieldwork, I prepared written consent forms which had to be approved by my institution. I then translated these forms into Arabic: the informants' native language. These forms contained all the necessary information needed by the participants on the aims and nature of the research study.

After recording a handful of interviews, I realised that obtaining the consent in written form before conducting the interview was too formal and made people skeptical and hesitant about being recorded. Therefore, I decided to give them the written consent form at the end of the interview; however, in all cases I gave clear instructions about the nature of the research orally. In addition, all interviewees gave verbal permission before being recorded.

Before we began the interviews, I reassured the informants that their recorded speech was purely for academic research purposes and that their data would be confidential as well as anonymous. I also added that my supervisor and I would be the only ones to have access to their recordings and any future use for presentation or conference purposes would only proceed with their consent. More importantly, I encouraged participants to talk about general everyday topics avoiding any sensitive and controversial issues, such as politics or religion, in order to help them feel more at ease when being recorded and eliminate the possibility of their withdrawal.

4.2 The fieldwork

In this section, I will describe my position and access to both communities: Bedouin and urban and the time and location of data collection.

4.2.1 The researcher

The status of the researcher in the community plays an important role in accessing the community. Although I was born in Jeddah, I consider myself as a native of Medina and my native dialect is the urban Medini variety. I come from a well-known family both from my parents' and my husband's side. Indeed, as an insider of the urban community, I did not encounter any problems accessing this community. I was helped by my relatives and friends in every possible way to find particpants and thus was able to record good-quality data. Interviewees were very cooperative and enthusiastic to take part in the interviews and even made comments and jokes about different topics. For example, I remember one specific interview with an older urban female, who enjoyed herself so much that she sang a song. The interviews with the urban speakers were conducted by myself with both the male or female speakers.

In contrast, access to the Bedouin community was facilitated by one of my colleagues who I met during my studies at Essex University and who happened to be a native speaker of the Bedouin Medini variety of the clan of Banū Sālim. I was also helped by a male assistant, who was a native speaker of the Bedouin Medini variety of the clan of Banū Masrūḥ. Through both of them, I was introduced to the Bedouin community not only as a researcher but also as a friend of theirs or their family. By adopting this dual role, the Bedouin informants felt a social obligation to help me and agreed to participate in the current study because I was their relatives' friend. However, after listening to their interviews, I became aware and had first-hand experience that Bedouin speech of these different clans should be treated as two different sub-varieties: the Bedouin Hiğāzi variety and the north central variety. For this reason, my set of data considered for quantitative analysis was only confined to the speech of the clan of Banū Masrūh, especially the clan of al-'Ōfi while the data from the clan of Banū Sālim were not counted. Most of the interviews with the speakers of the Bedouin community of the clan of al-'Ōfi were conducted by my male assistant, who is an insider and a native speaker of that variety. I first met him with my husband and had an interview with him and his younger brother to give him an idea on how to conduct interviews. Then I gave him my digital recorder so that he could conduct the interviews and while I was in Medina I had contact with him as he used to hand me one or two interviews on a regular basis. In this way, I was able to listen to the interviews and give him any feedback. By adopting this approach of having an insider as an assistant, I felt sure that the Bedouin participants would not be influenced by my presence and accommodate to my dialect. Like the song performed by the old urban woman, I remember one Bedouin interview with an old male speaker, who recited a qaşīda 'a Bedouin poem'. Although I did not understand the poem, I felt that the interviewee was completely at ease with the interviewer (my assistant).

All in all, my fieldwork experience was enjoyable and informative because this research allowed me to expand historical and sociocultural knowledge about Medina. Interestingly, towards the end of each interview the roles were reversed as I was asked many questions by the participants as they were curious about my opinions and life in general and in the UK.

4.2.2 Time, location and equipment

The fieldwork for the present study was carried out in two successive periods: the first data collection was done during the summer months of 2013, and the second in December 2013. All of the interviews were located at the interviewees' homes where I was welcomed with a friend as a visitor. I can describe them as social gatherings during which we had chats about different topics and enjoyed different types of food. Likewise, my male assistant conducted

the interviews with the Bedouin participants. For the recordings of the interviews, I used an Olympus Linear PCM digital voice recorder. It is battery operated and has a built-in stereo microphone and speaker, and was very effective in terms of voice quality. On some occasions, in addition to the digital recorder, I used my mobile phone. Both tools were small and discrete and could be placed on a coffee table without distracting the speakers. Interviews were recorded on Wave Sound and MPEG-audio and the duration of the recordings ranged from 40 minutes to an hour and a half.

4.3 The linguistic variables

After listening and transcribing the interviews, I was able to identify a number of linguistic variables, two of which are the (d_3) variable and the syllable structure variable. In this section, these linguistic variables will be presented.

4.3.1 The (dg) variable

In the communities under investigation, (dʒ) has two realisations; a voiced alveolar affricate [dʒ] and a fricative [ʒ]. The affricate variant [dʒ] is the traditional variant for the dialects of the urban community and the Harb Bedouin community of the clan of Banu Masrūh who migrated to Medina from the region of al-Hinākiyya, situated to the east of the city. As a native speaker of Medina and based on my data, I had no difficulty identifying that [dʒ] is the traditional variant. However, with the Bedouin variety I had to be careful that my pool of data came from the same clan because dialectal variations with respect to this sound distinguish one clan from the other. For example, data from the Banū Sālim clan of the Harb tribe showed that the fricative variant [ʒ] is the traditional realisation which was shown in the interviews I collected of old female speakers and which was also confirmed by one of my colleagues, a native speaker of the same clan. Therefore, I excluded data from this clan and relied only on data from al-'Ōfi clan of Banū Masrūh. The reason for this was that I wanted

to test for the effect of the community as a whole by including both the urban and Bedouin groups as a social variable. In order to assess the community factor, the traditional and innovative variants needed to be identical. In fact, researchers on the dialects of the Harb tribe classified them into: the Hiğāzi Group and the Northern Central Group; however, the fricative realisation of (dʒ) was not mentioned by II-Hazmy (1975).

With respect to this variable, I decided to test my data at two levels; firstly, the two communities were treated as separate entities and then secondly, I extended the analysis to include the aggregate data of both and hence the whole community as a social variable was correlated with the other linguistic and social factors under investigation (more details will be given in Chapter 5).

4.3.2 The syllable structure variable

The most common syllable structure in urban Medini Arabic is the light syllable CV and it is so common that speakers use this syllable structure to avoid the occurrence of consonant clusters. For example, a word in urban Medini can consist of a series of 5 syllables as in *ji.dyi.bu:.la.na* 'they bring us' or *jir.3a.Su:.la.ha* 'they return to her'. While listening to the interviews, I became aware that the younger age groups have a tendancy to reduce the number of syllables as in *naz.zal.la.na as-siSir* vs. *naz.zall.na as-siSir* 'he reduced the price for us'. This process of resyllabification results in the occurrence of consonant clusters where */l/* is resyllabified as a coda of the preceding syllable. Consonant clusters are not a typical feature in the phonotactics of urban Medini Arabic. Thus, the traditional variant is CV and the innovative variant is CC. This process of vowel reduction is known in phonology as syncope and it will be dealt with in detail in Chapter 6.

In contrast, the traditional syllable structure in the Bedouin variety allows the occurrence of consonant clusters either in word-initial, medial and final positions. In word-

initial position, onsets of consonant clusters can occur in words that have been subjected to: 1) the ghawa syndrome as in nax.la $\rightarrow nxa.la$ 'palm tree', or gah.wa \rightarrow gha.wa 'coffee'³⁹ where g is realised as a velar stop and h is a glottal fricative, or 2) Najdi resyllabilitation, viz $xafaba \rightarrow xfiba$ 'a piece of wood'. Initial consonant clusters are also found in words like *kba:r* 'big' and *s'ya:r* 'small' as opposed to the urban ones *kuba:r* and *s'uya:r*. Superheavy syllables in the form of CVVC and CVCC are permitted in different positions in Bedouin Medini Arabic and thus reducing the number of syllables as in *be*..*na*:*t*.*hum* 'between them' and *Sind.hum* 'they have got'. Such words in UMA would have an extra syllable as the codas /t/ and /d/, respectively, resyllabify as onsets of the following syllables after the addition of an anaptyctic vowel as in *be:.na:.ta.hum* and *Sin.da.hum*. In UMA superheavy syllables are only found in word-final position. I noticed that in the young Bedouin speech there is variation in favour of the insertion of an anaptyctic vowel which is known as epenthesis. Thus, the traditional variant is CC whereas the innovative one is CV (for analysis and discussion of data see Chapter 6 on the resyllabification variable). Regarding data analysis, I treated this variable separately with respect to the communities under research as the traditional and innovative variants are not identical.

¹⁶⁶

³⁹ See section 6.7.2 on ghawa syndrome in this thesis

The (cg) variable

In this chapter, the results of the analysis of the variable (dʒ), palato-alveolar affricate sound, in Arabic 'dʒiːm', are presented. As a native speaker of urban Medini and based on my data (with the older speakers using the affricate pronunciation and the younger speakers using the fricative variant), I can confirm that this variable has two variants in Medini Arabic: [dʒ], voiced palato-alveolar affricate, which is the traditional Medini variant; and [ʒ], voiced palato-alveolar fricative, which is the innovative variant.

The chapter consists of two parts. In the first part, descriptions provided by the medieval grammarians are summarised (\$5.1), followed by the descriptions of contemporary Arabists (\$5.2), and a review of the results of other studies that investigated $d_{5i:m}$ as a sociolinguistic variable in various Arabic-speaking communities (\$5.3). In the second part, the quantitative results of the present study are presented (\$5.4) along with analysis and interpretation of these results (\$5.5).

The phoneme /dʒ/ has a range of realisations: /g, g^i , d^j , d_3 , $_3$, $_j$ /. In my analysis, I will use the terms affrication and deaffrication to refer to the development of $d_3i:m$ in Medini Arabic. Bhat (1978) distinguished between three distinct processes which might lead to what is known as 'palatalisation'. These processes are:

• Tongue raising: this occurs when apical⁴⁰ or labial sounds become laminals and by which the blade instead of the tip of the tongue is used as the articulator and is triggered by a following semivowel or high vowel.

⁴⁰ A sound produced with the tip of the tongue

- Tongue fronting: this occurs more commonly with velars when followed by a front vowel (not always a high vowel) and preferably in a stressed syllable.
- Spirantisation occurs when "stridency or friction is added to a consonant in a given environment" (Bhat 1978: 50). In historical linguistics, spirantisation is relatively different and is known as lenition or weakening. It occurs when a velar stop becomes an affricate or when an affricate loses its occlusion in the vocal tract and thus becomes a fricative or an approximant (Kirchner 1998).

These three processes can occur either simultaneously or separately, and in Medini Arabic if we assume that the velar realisation was the original form, the diachronic development of the sound dzi:m can be hypothesised as follows: $g > dz > z_3$.

5.1 History and description of *dzi:m* by medieval grammarians

The Arabic sound dzi:m was described by a number of grammarians. Some of the most prominent are al-Xalīl (8th century AD), Sibawayh (8th century AD), and Ibn Ya'īš (10th century AD). Al-Xalīl⁴¹ (1980), in his book al-'Ayn, grouped dzi:m (/dz/) with *fi:n* (/f/) and $d^{c}a:d$ (d^c) as they share the same place of articulation (*fazarijja* 'alveolar').

Sibawayh⁴² (1988) described the place of articulation of *dzi:m as*:

... wamin wasat^ç ?al-lisa:n bajnahu wa bajna wasat^ç ?al-ħanak ?al-?a\$la

"from the centre of the tongue, between it and the centre of the palate"

(Sibawayh 1988: 433, translation by Blanc 1969: 17) These grammarians agree with al-Xalīl that dzi:m, fi:n and $d^{c}a:d$ are all fazarijja 'alveolar' but Sibawayh and IbnYa'īš grouped dzi:m with fi:n, and ja:? instead of $d^{c}a:d$. They also added that the sound dzi:m is madzhu:r 'voiced', fadi:d 'fortis' and $maftu:\hbar$ 'non-emphatic'. Two

⁴¹ In this thesis I used the 1980 edition of al-Xalīl's book *al-'Ayn*

 $^{^{42}}$ In this thesis I used the 1988 edition of Sibawayh'book *al-Kitāb*

other pronunciations of dzi:m were described by Sibawayh (1988:431) and IbnYa'īš (no date:125) but considered non-normative: 1) dzi:m realised as ka:f found in Yemen (probably as in Cairo /g/) and 2) dzi:m realised as fi:n (probably as in Damascus /ʒ/). They went on to specify that the letter dzi:m as fi:n occurs more frequently when it is immediately followed by [/d/] or [/t/] as in *muztamaf* 'society' and *2azdar* 'better'.

5.2 Accounts of the development of *dzi:m* in contemporary sources

Cantineau (1960)

Cantineau (1960) tracked the historical development of the phonology of the Arabic language and compared it with other Semitic languages (including Akkadian, Canaanite, Aramaic, Ugaritic, Hebrew, inter alia) with the aim of re-constructing the consonant inventory of Proto-Semitic. According to Cantineau, Proto-Semitic consonants were grouped into triads depending on their place of articulation, one of which is the velar triad comprising the emphatic /q/ which is voice-indifferent, the voiced /g/ and the voiceless /k/, illustrated in Fig.5.1.



Figure 5.1: Proto-Semitic velar triad

Old Arabic evolved from Proto-Semitic and the velar triad system was destroyed. One of the reasons the Semitic velar (post-palatal) triad was broken was due to the fronting or coronolisation of the Semitic *g in some Arabic dialects. The development of Arabic *dzi:m* can be schematized as follows based on Cantineau's research:

Proto-Semitic g > Pre-palatal Old Arabic $g' \rightarrow gy \rightarrow dy (= /gj/, /dj/)$

The alveolar dy experienced one of these changes: 1) the total abandonment of occlusion and thus only y [j] remained or 2) it became affricated \check{g} [dʒ] or it may have lost its occlusive element and became \check{z} [ʒ] as in figure 5.2.

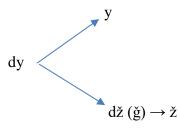


Figure 5.2: Development of dy (Cantineau 1960:57)

The palatalisation of Semitic g into dy, the affrication into \check{g} and its possible deaffrication into \check{z} occurred at different periods of time and varied from dialect to dialect. According to Cantineau, the medieval grammarians' correct pronunciation of dgi:m was g^y [g^j] but other realisations such as \check{g} and \check{z} were also widespread.

In modern dialects, there are several pronunciations of *dzi:m* as listed below (based on Cantineau 1960, 56:62):

1) Postpalatal [g] is used in Egypt, parts of Yemen and Oman

2) Prepalatal g^{j} or d^{j} is used by the Bedouins of North Arabia especially by the tribes of Šammar and ʿAnaze and also in Yemen

3) Palatal *j* is used by some north Arabian tribes of Dumat Al-Jandal and Hayel and of east Arabia in the lower Euphrates basin

4) Alveopalatal *dz* and postalveolar *z* are the most commonly used pronunciations in Iraq, the Syrian desert, rural Palestine, Jordan and in some parts of Algeria. The pronunciation *z* is

considered urbanised in Damascus, Beirut, Haifa and Naplus; it is the norm in North Africa especially Tunis and Morocco

5) The voiceless pronunciations \check{c} [\mathfrak{f}] and \acute{c} [\mathfrak{ts}] as in \check{car} 'neighbour' and \acute{celd} 'skin' are used in Palmyra and in the oasis of Al-Sukhnah, between Palmyra and Mesopotamia.

Kaye (1970)

As demonstrated in figure 5.1 & 5.2, dzi:m has undergone radical change historically, and shows considerable variation in modern dialects: [dz], [3], [j], $[d^j]$, $[g^j]$, [g], [z], [d] are possible realisations in various dialects. Based on the idea that modern dialects developed from a single koine (Ferguson 1959, see Chapter 3), Kaye's thesis is that the different realisations of /dz/ in modern dialects developed from the koine form /z/, as below.

1) Morocco, /3/ and /g/ developed as follows:

*/ $3/ \rightarrow /3/$ as in * /3u:S/ > /3uS/ 'hunger' except in the vicinity of sibilants where */ $3/ \rightarrow /g/$ as in */3aS/ > /gaS/ 'he cut'

2) Malta, $/d_2/$, /f/ and $/t_3/$ developed as follows:

 $*/3/ \rightarrow /d3/$ as in */3ábal/ > / d3ébel/ 'mountain'

 $*/3/ \rightarrow /J/$ triggered by regressive assimilation when followed by */t/ as in */xirá3t/ > /hrift/ 'I went out'

 $*/3/ \rightarrow /$ ff/ by dissimilation in final position as in */záw3/ > /zéwtf/ 'two'

3) Algiers, the Jewish /dz/ and /z/ developed as follows:

 $*/3/ \rightarrow /d3/$ as in */3 and */3 and */3 and */3 as in */3 and */

 $*/3/ \rightarrow /3/$ if followed by /-t/ as in $*/\hbar$ á: $3ti/ > /\hbar$ á3ti/ 'my thing'

4) Djidjelli, a village in northeastern Algeria, /ʒ/ developed as follows:

 $*/3/ \rightarrow /3/$ as in */3 mal/ > /3 mal/ 'camel'

5) Tunis, $\frac{3}{and} \frac{z}{d}$ developed as follows:

 $*/3/ \rightarrow /3/$ as in */3ábal/ > /3bál/ 'mountain' or

 $*/3/ \rightarrow /z/$ in the vicinity of sibilants as in */3 (bs/ >/z) 'plaster'

6) Aleppo, /dʒ/ developed as follows:

*/ $z/ \rightarrow /dz/$ as in */zámal/ > /dzámal/ 'camel'

7) Cairo, /g/ developed as follows:

*/ $3/ \rightarrow /g/$ as in */3ámal/ > /gámal/ 'camel'

8) Damascus, /3/ developed as follows:

*/ $3/ \rightarrow /3/$ as in */3ámal/ > /3ámal/ 'camel'

9) Khartoum, /di/ developed as follows:

*/3/ \rightarrow /d^j/ as in */3ábal/ > /d^jabal/ 'mountain'

10) Baghdad, Muslim /dʒ/ developed as follows:

*/ $3/ \rightarrow /d_3/$ as in */ $3ild / > /d_3ilid / 'skin'$

11) Yemen, Jewish and Muslim /dʒ/ developed as follows:

*/ $3/ \rightarrow /d_3/$ as in */3íld/ > / d_3 ild/ 'skin'

12) Jugari, a village near Bukhara in former USSR, /dʒ/ developed as follows:

*/ $3/ \rightarrow /d_3/$ as in */ $3awá:b/ > /d_3awó:b/$ 'answer'

13) Medina, Saudi Arabia, /dʲ/ described by Kaye as "a palatalised voiced denti-alveolar stop with a strongly affricated release" (1970:59)⁴³, developed as follows:

$*/3/ \rightarrow /d^{j}/as$ in $*/3amal/ > /d^{j}amal/$ 'camel'

Based on the above list, Kaye suggests the following development: PS*/g / > PCA*/ʒ/ > Cairo /g/, Baghdadi /dʒ/ (Kaye 1970: 63). Based on this proposal, Kaye believes that Damascus Arabic is more compatible with modern Standard Arabic and other modern dialects than any other Arabic varieties since the Damascus dialect retains [ʒ] as the main variant of *dʒi:m*. Another argument Kaye uses to prove his thesis is the development of the word /wijʃʃ/ 'face' in Cairo Arabic. According to him, this word must have gone through the following development: */wiʒh/ > */waʒh/ > */wiʒʒ/ > /wijʃʃ/. Here */ʒ/ is the PCS⁴⁴ in Cairo Arabic and over time /h/ became /ʒ/ by regressive assimilation, then /ʃ/ developed through the devoicing of /ʒ/. Thus, for Kaye Cairo [g] does not represent the old Semitic /g/ but is a development from */ʒ/ to /g/ (cf. Woidich & Zack 2009 below).

Anīs (1999)

Anīs (1999) evaluates the two hypotheses on the development of *dzi:m* in the modern dialects. The first hypothesis, proposed by Kaye (1970), that the original form from which the modern realisations developed was the fricative /ʒ/ from which Cairo /g/ and Upper Egypt /d/ developed. In his view, this hypothesis is problematic as it contradicts the 'Palatal Law', according to which palatalisation occurs when velar stops are in the vicinity of front vowels. A number of linguists have investigated this phenomemon in Latin and Germanic languages as we shall see in section 5.7.1. The second hypothesis, proposed by Cantineau among others,

⁴³ Kaye does not specify the source of his data from Medina; it is thus unclear where this variant, [d^j] was recorded in this locality. As a speaker of the urban variety I have never heard this realisation in Medini. ⁴⁴ PCS stands for proto colloquial sound

is that Arabic dgi:m descends from the velar stop */g/, which is also the proto form of all modern realisations. Anīs (1999) presented several arguments in support of the second hypothesis. One such argument concerns the fact that Arabic words do not usually consist of adjacent sounds sharing the same place and manner of articulation. If the proto sound had been a palatal, its voiceless counterpart would have been /ʃ/, and it would have had the same manner and place of articulation as /z/; therefore, it would have been unlikely for dgi:m to be preceded or followed by /ʃ/ or /z/. However, there are many words in which /ʒ/, /ʃ/ and /z/ are adjacent, for example, *faʒara* 'tree' and *zawʒaha* 'her husband'. But if we suppose that dgi:mwas not palatalised then /k/ would be its voiceless counterpart, which can be proven by the fact that there are few words in Arabic containing both /k/ and /g/. This is supported by the claims of Ibn Jinni as cited in Anīs (1999: 73):

"...ħuruːf ?aqsʿa ?al-lisaːn ?al-qaːf wal-kaːf wal-dʒiːm wahaːðihi laː taʒtamiʕ albatta..."

the letters of the back of the tongue /q, k, g/ never co-exist.

Furthermore, according to Anīs, *dzi:m* mostly occurs in adjacency to plain (as opposed to emphatic) sounds, followed by a front vowel and not a back vowel, which is the prime environment that triggers fronting and palatalisation of velar sounds.

Blanc (1969)

Blanc (1969) proposed that Arabic is the only Semitic language that underwent fronting of the velar stop /g/ and voicing of the Semitic *q to /g/. He claims that fronting of /g/ took place in early times and [dʒ] was commonly used in the 7th and 8th century even before the shift of q > [g] that occurred in some Arabic dialects. With the voicing of /q/ the split between the qa:l-ga:l dialects⁴⁵ was established. Therefore, according to Blanc's assumption today's Cairo

⁴⁵ qa:l=qāl: sedentary dialects / ga:l=gāl: Bedouin dialects

/g/ is a recent development of the fronted dgi:m, which is in line with Hary's hypothesis as we shall see below. Scholars were interested in explaining this fronting phenomenon, two of whom are Cantineau and Martinet. They believed that this fronting happened because of the functional pressure of voicing q in order to distinguish the meaning between similarly pronounced pairs, such as *faqrun* 'poverty' versus *fagrun* 'dawn', *qali:la* 'little' versus *gali:la* 'respected'. In other words, to avoid confusion in any dialect which exhibited voicing of q, the fronting of g was necessary. However, both Cantineau and Martinet were aware that their explanation was not tenable since fronting also occurred in qa:l dialects where fronting was not actually needed. To solve this dilemma, they explained it in terms of borrowing but then they diverged in their opinions. Cantineau believed that the fronted g existed before the division between the qa:l-ga:l dialects occurred, stating that sedentary q was borrowed at a later time from Aramaic speakers who came into contact with the nomadic Arabs. On the other hand, Martinet claimed that the split had already happened as the reflex /g/ for /q/ had been borrowed from Arabic dialects before the fronting of Semitic *g.

To answer this issue of whether fronting happened before or after the *qa:l-ga:l* split, Blanc (ibid) used arguments from both old and contemporary sources to prove his stance that fronting happened first. From older sources, he (ibid) gives an account of Sibawayh's description of *qa:f* and *dzi:m* with respect to their variation, manner and point of articulation. Sibawayh provided only one pronunciation for *qa:f* whereas *dzi:m* had three variants: one acceptable as fronted [g'] and two non-normative variants [g] and [3]. As for manner of articulation, Sibawayh grouped *qa:f* and *dzi:m* with the *madzhu:ra* 'voiced' sounds; however, for Sibawayh the *madzhu:ra* sounds were not consistently voiced so that the voiceless allophones of sounds such as *qa:f* could be included. He also described both *qa:f* and *dzi:m* as *fadi:da* 'fortis' and voiced, though *qa:f* was less voiced than *dzi:m*. With respect to point of articulation, *qa:f* is a postvelar while *dzi:m* is a mediopalatal. After Sibawayh, from the 10th century onwards, scholars began to detect the existence of a new variant of q, somewhere between ka:f and qa:f, that was, [g]. Avicenna or Ibn Sīna, for example, in the 11th century described a postvelar normative q and another variant [g] and so the qa:l-ga:l dialect split began. In the 15th century, Ibn Xaldūn was the first scholar to consider qa:f and its variants from a sociolinguistic perspective by assigning the variants [q] and [g] into sedentary and Bedouin speech communities, respectively.

Concerning *dzi:m*, the sound was fronted even further than [g'] and an affricate variant [dz] developed and became the norm by at least the 11th century. However, [g] was witnessed in Yemen "from the tenth century on, less clearly for Iraq but not for Egypt until fairly recently" (Blanc 1969: 23). Blanc (ibid) summarised the development and relationship between *qa:f* and *dzi:m* as follows:

"Stage I- Proto-Arabic (closest to Common Semitic)

q ġ g Х k š Stage II – Earliest Arabic ġ q g k š х _ Stage III – Old Arabic (8th century) ġ ģ q š." k х

(Blanc 1969: 29-30)

(Blanc 1969: 27)

Stage I indicates the existence of a velar triad: q is voice-indifferent, g, [g] is voiced and k is voiceless. In Stage II the velar triad broke and q became separated and was pronounced as a postvelar voice-indifferent stop; g, [g] is the voiced velar and [k] is the voiceless counterpart. In this stage, g, [g], was not fronted and may correspond to the sound used in pre-Islamic times. In Stage III, which represents Sibawayh's grammar, g, [g'] became fronted and was paired with its voiceless counterpart \check{s} , [f], and [q] lost its voicing. By the 10th century, [q] was replaced by the velar [g] by some Arabs; thus the sedentary/nomadic division began to appear in the use of the normative variant [q] and the new nomadic [q].

From contemporary sources, it is evident that dgi:m was fronted before the shift of q to [g], but because this was only recorded in the 10th century the fronting of dgi:m cannot be attributed to functional pressure. Blanc states that

"...whereas j is clearly fronted nearly everywhere, q has hardly anywhere reached the position of Sem.[g]."

In fact, the present distribution of fronted vis-à-vis non-fronted *dzi:m* can hardly be linked to the *qa:l-ga:l* split as both variants have been reported in *qa:l* dialects such as Cairo Arabic

and in *ga:l* dialects like the ones spoken in south Syrian desert and North Arabia. Moreover, Blanc (ibid) justified the existence of today's non-fronted [g] to depalatalisation especially in Cairo Arabic and thus confirming that the velar /g/ developed from an earlier fronted Cairene /g'/.

Hary (1996)

In a similar vein, Hary (1996) traced the historical development of the sound dim in colloquial Urban Egyptian Arabic. He showed the trajectory of dim in the following linear development:

"g → g/g'/ğ → ğ → ğ/g → g 6th/7th cent. 8th-11th cent. 12th-17th cent. 17th-19th cent. 19-20th."

(Hary 1996:153)

Hary (ibid.) gave various pieces of evidence to support this development. Firstly, according to him, Judeo-Arabic texts were useful sources as they had been written in Hebrew characters enabling the demarcation between the fronted dgi:m which was either represented with a supralinear dot above the *gimel* \ddagger to refer to the [dʒ] pronunciation or with an apostrophe followed by the *gimel* $\end{Bmatrix}$ to refer to the fronted [g']. In addition, the *gimel* without any diacritics \ddagger indicates a velar stop pronunciation. He also states that the manuscripts written in the late 17th century "almost always exhibits the \beth with a *gimel* with a supralinear dot \ddagger for a possible affricate pronunciation" (1996: 154). Secondly, Blanc (1969) claimed that Arabic is the only Semitic language that has witnessed palatalisation/fronting of the Semitic /g/ to variants like [g'], [d'], [dʒ] and [ʒ], and has encountered the voicing of Semitic /q/ to [g] as one of the reflexes of /q/. Thirdly, based on Sibawayh's description of *dgi:m* in the 8th

century, the acceptable realisation "was mediopalatal stop (fronted [g'])" (Hary 1996: 156). However, the other pronunciations existed as well.

Based on these three arguments, Hary (ibid) concluded that before Islam, Arabic $d_{ji:m}$ was not fronted as it was realised as a velar stop [g], as in other Semitic languages. However, with the spread of Islam from the 8th to the 11th century, the pronunciation of $d_{ji:m}$ began to display gradual variation from back [g] to front [g'] and later to the affricate [d₃] and fricative [3]. Consequently, the extended period from the 8th to the 11th century marks the onset of the variation of the sound $d_{ji:m}$.

Hary (ibid) believed the change to the affricate variant [dʒ] was completed in the 12^{th} century in Urban Egypt and remained dominant until the seventeenth century. A few cases indicate that at the beginning of the seventeenth century, the linguistic norm was the affricate [dʒ]. For example, the use of the word *wiff* 'face' in colloquial Urban Egyptian Arabic advocates the presence of a palatalised *dʒi:m* [dʒ]/[ʒ], not a velar stop [g]⁴⁶.

In Hary's account, from the 17th century until the 19th century there was a reversed sound shift from the affricate [dʒ] to the velar stop [g] in Urban Egypt Arabic. By the beginning of the 19th century, the shift to the velar stop was complete, at least in Cairo, where $d_{ji:m}$ was realised as [g]. In Alexandria, however, the stabilisation of the velar stop took place at a later time. Hary's opinion is that colloquial Lower Egyptian [g] although it corresponds to the old Semitic /g/, is a new innovation as shown in the linear development above.

⁴⁶ See above in§5.2, Kaye's explanation showing derivation of this word

Woidich and Zack (2009)

As was shown, according to Blanc (1969) and Hary (1996), Lower Egyptian /g/, despite being identical to old Semitic /g/, is a new sound that developed from the affricated variant by means of a sound shift which involved depalatalisation and back-shifting, thus resulting in the change from the palato-alveolar affricate to the voiced velar plosive. Contrary to this, Woidich and Zack (2009) argue in favour of the view that Egyptian /g/ is not an innovation but is derived from an older variety of Arabic spoken in pre- or early Islamic times, where the old Semitic /g/ was maintained without undergoing palatalisation or affrication. They based their assumption on different pieces of evidence from both inside and outside Egypt.

The first piece of evidence they use is the geographical distribution of the velar realisation, namely in disconnected peripheral areas: Egypt, Yemen and Oman. This type of distribution suggests that the presence of this realisation in these areas is a relic feature, rather than an innovation, although this discontinuous distribution does not totally exclude the development of independent innovations.

Secondly, evidence is cited from assimilation of a preceding definite article *al*-. In Classical Arabic, /dʒ/ is not counted among the sounds that assimilate the definite article, the so-called 'Sun Letters', namely 'coronal consonants'; this means that its phonetic property was anything but palatal, i.e. velar.

A third piece of evidence for the presence of /g/ in pre- and early-Islamic times comes from Arnold-Behnstedt' s study of Arabic-Aramaic connections in the Qalamūn in Syria (1993 as cited in Woidich and Zack 2009:44). In Ma'lūla-Aramaic there are two stages of Arabic borrowings with dzi:m: i) an older one with /ġ/ as a reflex of dzi:m, and ii) a newer one with /ʒ/ or /dʒ/ as a reflex of dzi:m. Older Aramaic /ġ/ can only be traced back to /g/ not to /dʒ/. Consequently, the contact at this first stage between the old Arabic dialect and Aramaic in Syria implies that Arabic had the velar /g/ but not the fronted affricate form, /dʒ/.

Fourthly, the northern/southern split in Moroccan dialects between /g/ and /d/ instead of the sound /ʒ/ in the words containing sibilants is another argument for the old Semitic /g/. Dialects with /g/ are northern while the southern dialects have /d/. The assumption that the presupposed fronted /dʒ or ʒ/ changed into /g/ and /d/ motivated by a dissimilation of the affricate in the presence of sibilants is not only problematic in terms of phonological development: /dʒ/ > /g/ per se, but also does not explain why northern dialects have /g/ while the southern ones have /d/. Nevertheless, if the velar stop *g, /g/, is regarded as the starting point to explain the development of today's /ʒ/, the split between the Northern (A) and Southern (B) dialects can be explained. The following developmental stages of *gəbha 'forehead' and * gəzz 'to shear' taken from Woidich and Zack represent this point:

"	dialects A	dialects B	
origin	gəbha gəzz	gəbha gəzz	
palatalisation	g ^j əbha gəzz	g ^j əbha g ^j əzz	
depalatalisation	d ^j əbha	d ^j əbha d ^j əzz	
depalatalisation		dəzz	
affrication	dzəbha	dzəbha dəzz	
deaffrication	3əbha	3əbha	

```
zəbha gəzz zəbha dəzz"
```

(Woidich and Zack 2009:45)

The illustration above traces the development of dgi:m from the velar stop g, /g/, to the modern /3/ in both dialects in Morocco. In the Northern dialects (A), g, /g/ without the presence of sibilants developed into g^{i} , $/g^{i}/$ due to palatalisation. Afterwards, g^{i} changed into

 d^{j} by fronting. Then d^{j} underwent affrication and changed into d_{2} which again lost its closure point and became the modern 3. However, the velar stop g, /g/ remained constant in the vicinity of sibilants. Concerning the southern dialects (B), this same pattern occurred in the absence of sibilants; however, in the vicinity of sibilants d^{j} lost its off-glide and became d as in dazz due to depalatalisation. This account explains the reason why in the Northern dialects, g, the oldest variant, has not changed and is still used in the vicinity of sibilants, while in the Southern dialects, g underwent change and became d in the vicinity of sibilants.

A fifth piece of evidence against Blanc (1969) and Hary's (1996) claim stems from the fact that their reasoning behind the development of d_{i} in colloquial Egyptian Arabic was based on Judeo-Arabic texts written in Hebrew characters. This is not only unconvincing but also impossible as spoken Egyptian Arabic cannot be compared to Jewish Arabic written in Hebrew. Moreover, it is more plausible to interpret the variation or replacement of $\frac{d_3}{d_3}$ with /g/ in Jewish Cairo Arabic as a sociolinguistic change, and not as an internal unusual sound shift in progress. Sociolinguistically, the Jewish community in Egypt used /g/as ameans of adaptation/accommodation to the more influential and/or mainstream variety of Muslim Cairo Arabic which retained the velar /q/. In another attempt to prove their claim, Hary and Blanc used Latin scripts written by European travellers on expeditions in the early eighteenth century. The reliability of these writings is questionable as they lack consistency and conclusive remarks about the linguistic situation in Egypt at that time. Furthermore, these accounts were created on subjective information from foreign language speakers of Arabic, who could have been negatively influenced either by their formal teaching of Classical Arabic or by their potentially biased social interaction with native Egyptians. Additional pieces of evidence taken from other European travellers' narratives and Arabic verses⁴⁷in

⁴⁷ for more details see Woidich and Zack (2009: 49-55)

which the velar stop [g] predominantly appeared, points to the existence of a much older /g/d dated back to the 17th century or even earlier than the one hypothesized by Hary and Blanc.

A final piece of evidence came with the Egyptian Dialect Atlas of 1985 which shows that today /g/ is the main variant used in Cairo and along the east branch of the Nile Delta, which was the main trade route in the Middle Ages. This suggests that /g/ is an old feature which, because of its geographical distribution in the capital and along the trade route, was resistant to change from the impact of the Bedouin variant [dʒ] and so, continued to spread due to the dominance of Cairo Arabic and the varieties spoken in the areas along the Nile Delta.

5.3 dzi:m from a descriptive dialectological perspective

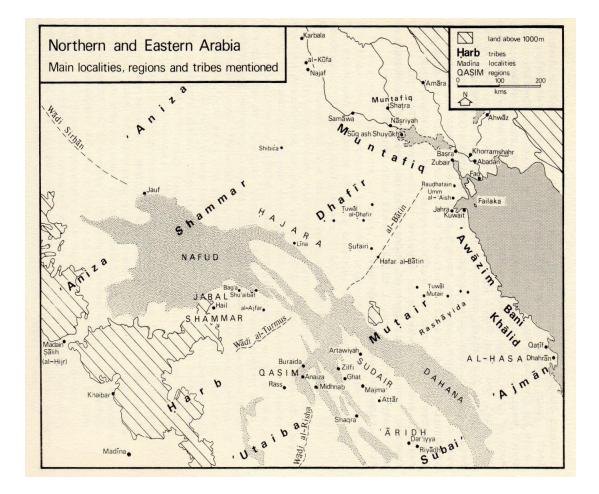
Johnstone (1965 & 1967) wrote dialect descriptions of the eastern Arabian Coast, focusing on the dialects spoken in Kuwait, Bahrain, Qatar and the Trucial Coast. He identified these dialects as being recent developments from the 'Anazi dialect group which is in the centre of the Arabian Peninsula. In the phonology of each of these dialects, Johnstone (ibid) examined the variation in the use of *dzi:m*, which in these geographical areas is between [j] and [dʒ], listed as follows:

In Kuwaiti Arabic, the use of [j] for dʒi:m is phonetically unconditioned in that [j] can occur in the vicinity of front or back vowels as in hajar 'stone', but [j] does not usually occur in foreign words as in dʒu:ti 'shoes'. However, in Kuwait this feature is diminishing as [j] is being replaced by [dʒ] especially in koineised Arabic words.

- In Bahraini Arabic, the use of [j] is more frequent and is the norm particularly across common words as in *ja:b* 'he brought' and *jid:d* 'new'⁴⁸.
- 3) In Qatari Arabic, there is a distinction between two groups of speakers: 1) the dominant group and 2) the indigenous settled and semi-settled group from the north including merchants of Persian descent. In the dominant group, one of which is the Hāğiri, the use of [dʒ] is predominant while the second group is more similar to Bahraini, where [j] is more frequently used.
- 4) In the dialects of the Trucial Coast, [j] occurs more often mainly in the dialects of Abu Dhabi and Buraimi in Oman than in the other eastern Arabian dialects whilst in Dubai and Sharjah [j] is used to a lesser extent.

Ingham (1982) collected data from different regions in the north-eastern part of the Arabian Peninsula including Khuzistan in southern Persia, Basra and Zubair in Southern Iraq, northern Saudi Arabia, and Kuwait. Map 5.1 taken from Ingham (1982:6) shows the areas covered in his dialectological study.

⁴⁸ However, this statement is true only of the dialect of the Sunni Bahrainis because for the Shi'i Baḥārna, whether urban or rural (and who are in the majority), [dʒ] is the main variant apart from four exceptional villages which have [j], and two where there are traces of [gⁱ] as was shown by Holes (1980, 1987).



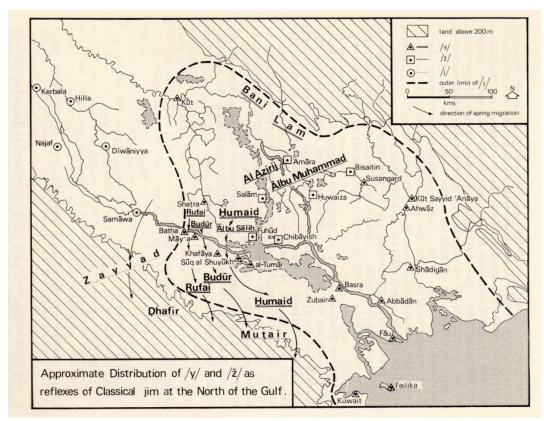
Map 5.1: Map showing areas covered in Ingham's (1982) study (source: Ingham 1982: 6)

It is worth noting on the map that the clan of the Harb tribe under investigation in my study is located to the north-east of Medina. Ingham (ibid) studied the distribution of some linguistic variables in order to describe the dialect geography of this region which he classified into three zones of communication:

- 1) Najd consisting of Jabal Shammar, Qasim and central Najd
- The major towns on the Gulf Coast: Dammam, Hofuf, Dhahrān and Qațīf in Al-Hasa
- 3) Southern Iraq and Khuzistan

One of Ingham's (ibid) linguistic variables was the distribution of the reflexes of dzi:min these areas. He found that in Iraq /j/ is a mark of southern areas and of the Šī'i community, /dz/ is characterised as a non-southern type, and /z/ is a distinctive dialect feature in some parts of southern Mesopotamia especially in 'Amāra area. In contrast, in Kuwait and other Gulf states, /j/ is the prevalent form and is linked to the sedentary population and Sunni speakers of Zubair in southern Iraq, while /dz/ is the pronunciation of the Bedouins regardless of whether they are nomadic or settled.

He also differentiated between the most conservative (inner Arabia) and the least conservative (Mesopotamia and the Gulf) dialects. In the latter dialects where change was inevitable, /dʒ/ and /j/ were merged into /j/. The following map from Ingham (ibid: 36) shows the distribution of the reflexes of dzi:m at the North of the Gulf.



Map 5.2: The distribution of the reflexes of *dzi:m* at the North of the Gulf (source: Ingham 1982: 36)

Holes (1989) carried out a survey and investigated 15 different areas in northern and central Oman to classify the varieties spoken there. He found that Omani dialects can be classified into Bedouin and Hadar 'sedentary' dialects corresponding to the dichotomy between the nomadic and settled lifestyles of its speakers, respectively. Bedouin dialects are subdivided into B1, used in the northern desert, and B2, spoken in the southern desert, both of which use the variant [j] as the main reflex of dzi.m. Hadar dialects are also subdivided into H1, mainly used in the interior of Oman, and H2, used in the mountainous region of Jabal Akhdar. In H1, [g], [J]⁴⁹and [c] are the main variants for dim whilst in H2 the main variant is [ʤ].

What is clear from these dialectological studies is that *dzi:m* has many realisations in Arabic and its variants have the potential to differentiate dialect from dialect. Consequently, sociolinguists have been interested in investigating this linguistic variable (dz) and its correlations across certain social factors. The following section summarises a number of the sociolinguistic studies on *dzi:m*.

5.4 dyi:m as a sociolinguistic variable in the Arab world

In the Arabian Peninsula

In Qatar, al-Amadidhi (1985) formulated two rules for *dzi:m* in Qatari Dialect; namely, the colloquialisation rule: $d_{i}m \rightarrow [i]$ and the standardisation rule: $d_{i}m \rightarrow [d_{i}]$. He then investigated their use with respect to certain intra- and extra-linguistic factors. Regarding the intra-linguistic factors, the tokens were classified into four classes⁵⁰so that the lexical scale ranged from the pure dialectal through to the most standard Arabic and loan words. Forty-

⁴⁹ [J] is a voiced palatal stop
⁵⁰ See al-Amadidhi (1985: 111-120)

eight male speakers were divided into four social groups: 1) Badu (Bedouins), 2) Qabā'il (Tribes), 3) Howala (Returnees), and 4) 'Ağam (Persians). The first group are Bedouin while the other three groups are sedentary. They were also classified into two age groups: old (over 50 years old) representing the era before oil and young (between 20 to 35 years old) representing the era after oil. Education was used as a social factor and thus only the young age group was divided according to their level of education: elementary, secondary, and university level. The interviews were split into formal, casual and reading styles to examine register as a social factor. Results revealed that the application of the colloquialisation rule was favoured when dzi:m occurred at the extreme end of the lexical scale which contained pure dialectal words while application of the standardisation rule was favoured at the other end of the scale which contained standard and loan words. Regarding the four social groups, [j] was revealed to be a sedentary feature while [d] was predominantly used by the Bedouin group. It is worth mentioning that the 'Ağam group, who mainly used [dʒ], accommodated their linguistic behaviour to that of the other two prestigious sedentary groups, for whom [j] was the norm. As for age, there were indications of two opposing directional changes led by the younger generation. The first change was towards the use of $[d_3]$ by the sedentary groups and the second, was towards the use of [j] by the Bedouins. Finally, the shifting of register proved to be significant in that the formal styles favour [dʒ] while the informal ones showed an increase in the application of the colloquialisation rule, i.e. [j]. Concerning education, the more educated the speakers are, the more likely they will apply the standardisation rule, [dz].

In Jeddah, Al-Shehri (1993: 42) investigated patterns of language change and variation in the use of the variable (dʒ) amongst rural speakers who had migrated to Jeddah and settled there permanently in the most urbanised and cosmopolitan area of Saudi Arabia. In terms of social group, they all had tribal affiliation and originated from the same rural areas located in southern Hiğāz on the highlands of south-western Saudi Arabia, nearly 700 km. south of Jeddah. This group can be identified as indigenously Arabian and thus their common identity, ethnicity and cultural background is clearly distinguishable from the host population of Jeddah who come from dissimilar cultural backgrounds. These urbanised rural speakers showed variation in the use of $d_{ji:m}$, which was either realised as the urban palatoalveolar affricate $[d_3]^{51}$ or as the rural palatal approximant [j]. Al-Shehri (1993) explained that the variation of $d_{ji:m}$ is remarkably salient because its variants are phonetically and orthographically distinct. Both variants are present in the consonantal system of the dialect spoken in that speech community, but [j] as a reflex for $d_{ji:m}$ is only used in colloquial speech.

Data were collected from 84 speakers, of whom only 22 were female. According to Al-Shehri, female speech was underrepresented in his sample. Methods of collecting data consisted of sociolinguistic interviews and group conversations. Informants were divided into four age groups ranging from 15 to 60 years old, and into four educational levels ranging from uneducated to college education. Their length of stay in Jeddah was also considered as a social variable divided into three time periods; (1-5 years), (6-10 years) and (11+ years). Internal constraints were not considered in the study.

According to Al-Shehri (1993: 78-79), the sociolinguistic connotations accorded to the variants [dʒ] and [j] in Western Arabia differ from those in Eastern Arabia. In Eastern Arabia (Bahrain), [dʒ] is used by the \tilde{S}_{1} i majority social group while the use of the prestigious local variant [j] by the Arabs from Bedouin descent indicates association with the powerful royal family. In Western Arabia, by contrast, the situation is reversed in that the local use of [j] has no prestige at all and is undergoing a process of change and variation in

⁵¹ It is unclear why Al-Shehri found [dʒ] as the main urbanised variant since in Jeddah Arabic the urbanised variant is [ʒ] based on information from Jeddah native speakers. It could be that he did not make the difference between the two allophones: [dʒ] and [ʒ]

favour of [dʒ], the urbanised variant. Al-Shehri's results showed that the linguistic behaviour of the informants with respect to the variants [dʒ] and [j] is mainly governed by the speakers' age and their level of education with the youngest and most educated leading the increasingly progressive change towards the standardised urban variant [dʒ]. However, the interaction between age and education showed that age plays a more predominant role than education. The gender variable was not significant. The length of stay variable revealed an apparent paradox in that the rural immigrants who had spent the least time in the urbanised city tended to use the urbanised [dʒ] variant more than the rural [j] variant. Al-Shehri (1993: 97) commented that the rural variant [j] has no local prestige at all and urbanised rural immigrants are very well aware of its strong social connotation and stereotype. As a result, it was concluded that

"... this variant is undergoing a genuine linguistic change, and may one day become obsolete in the rural variety."

(Al-Shehri 1993:97-98)

Holes (1980, 1983, 1986, 1995) investigated variation in the use of *dzi:m* in the dialects spoken in Bahrain in a series of studies. The dialects studied were the 'Arab, Baḥārna A and Baḥārna B dialects. The Arab dialect is used by the descendants of the Bedouin tribes, all of whom are Sunnis whose main variant of *dzi:m* is [j]. The Baḥārna A and Baḥārna B dialects are used by the indigenous villagers all of whom are Ši'is; speakers of the former dialect use [dʒ] as the main variant while those of the latter dialect have [j] as the norm. Holes correlated the use of these variants with a number of social factors, some of which are sect affiliation, literacy, urbanisation and gender as well as the type of lexical items, considered as the linguistic constraint. Results showed that all of these factors were significant and that there is some degree of convergence among the three dialects at different levels resulting in the creation of an 'inter-communal dialect'. For example, in informal contexts in which the vernacular is mainly used Arab Sunni speakers remained loyal to their [j] variant. Speakers of

the Baḥārna A tended to switch from [dʒ] to the [j] variant, linked to prestige and power, which Holes considers to be a temporary change. In contrast, their counterparts of Baḥārna B chose to adopt [dʒ] as a sign to show their solidarity with the other Šīʻi community. In public formal contexts, to accommodate to the variant used in the Pan-Arabic koine and to Modern Standard Arabic, literate speakers of all dialects showed signs of convergence to the [dʒ]variant.

In a more recent study in Bahrain, Al-Qouz (2009) investigated the impact of dialect induced contact on the linguistic behaviour of Bahraini schoolchildren. The main objective of this study was to assess the outcome of the contact between Šī'i and Sunni schoolchildren throughout their years of schooling. Different phonological variables as well as a set of lexical items were investigated, one of which was the (d3) variable. Data was collected from 128 schoolchildren and their school was the setting for the interviews. Five social variables were covered by Al-Qouz (2009, 83-94); namely, ethnicity/sect, age, type of school, gender and social class. Age ranged from 6 to 17 to represent their stages of schooling. Sect referred to Sunni versus Šī'i groups. Social class was categorized into upper, middle and lower classes. The separation of the type of school, state or private, was only relevant to the upper class children as private schools' tuition fees are not affordable to the middle and lower social classes. As far as the (d_3) variable was concerned, the Sunni variant [j] and the \tilde{S}_{1} i variant $[d_3]$ were studied by using a list of lexical items that had been proposed by Holes $(1987)^{52}$. This list contains mainly lexical items with MSA equivalents but also included a few frequently-used dialectal words that do not exist in MSA; this was her linguistic factor. Results confirmed that all the social factors were statistically significant. Specifically, her findings revealed that the Sunni group maintained their use of [j] categorically from one

⁵² It is Holes's second list (1987: 63-64) which contains 59 words

generation to the next across all the words in the list. This meant that the Sunni schoolchildren had not been influenced by their \check{S}_1 i classmates' use of the MSA-like variant [dʒ]. By contrast, the \check{S}_1 i schoolchildren's behaviour displayed variation in their use of (dʒ) towards the adoption of the dominant Sunni [j] variant. This change was led by the upper class private school oldest age group (15-17) female children.

Taqi (2010) investigated the use of the variable (d_3) in Kuwaiti Arabic across certain linguistic and social factors. Forty- eight speakers were selected from three social variables: age divided into 3, gender and ethnicity between Najdi from central Saudi Arabia and 'Ağami originating from Iran. Different techniques such as picture-naming, interviews, map tasks and questionnaires were used to collect data. The variable (d_3) in Kuwait has two main realisations: the voiced palato-alveolar affricate [dʒ] used by the 'Ağami Kuwaitis and the voiced palatal approximant [j] used by the Najdi Kuwaitis. Taqi composed a list of lexical items grouped into three: i) words that always use [j], ii) words that always use [dʒ] and iii) words that can use both; this was her linguistic factor⁵³. Ethnicity, age and gender were significant in the use of $d_{i:m}$ by the 'Ağami group, who used the affricate [d₃] more than the palatal [j] whilst the Najdi community used [j] more. In the Najdi group, gender and age were not significant but among the 'Ağami, age and gender were returned significant. Taqi's results showed that young 'Ağami females used [j] more than their male counterparts. The researcher also conducted a sociolinguistic questionnaire to investigate participants' reactions towards the variation of dzi:m. This attitudinal study revealed that the use of the Najdi variant [j] not only projects the Kuwaiti identity but also the prestige linked to the Najdi community who hold the upper status on the social scale.

⁵³ For more details on the criteria adopted to construct the list of lexical items in which dzi:m occurred variably see Taqi's thesis (124-134).

Al-Qenaie (2011) carried out a sociolinguistic study of diglossia in Kuwait to assess variation across three levels of speech continuum: Classical/Modern Standard Arabic (the most standard and formal), Kuwaiti Modern Arabic (a standardised version of the local dialect) and Kuwaiti Arabic (the most informal). Data from two contexts was used; firstly, informal data were collected through casual interviews and social gatherings; secondly, recordings of the Kuwait National Assembly, political shows and a Friday sermon read by an 'Imām 'preacher' at a mosque were selected from YouTube as the formal data. There were twenty-eight participants selected from four social factors: age: young, middle and old, gender, religious affiliation: Sunni versus \tilde{St} 'i, and the area-origin of Kuwait City: inner - Hadar 'urban' and outer - Bedouin. Three phonological variables were validated statistically; namely, affrication of /k/, fronting and affrication of /q/, and palatalisation of dgi:m, and when their allophones [tʃ], [g, dʒ], and [j] were used respectively, the speech would be classified as informal resembling the most colloquial variety, that is, Kuwaiti Arabic. Results showed that the speech situation in Kuwait is multiglossic with seven overlapping speech levels⁵⁴, which are all functionally distributed.

As far as the sound change $d_3 > j$ is concerned, Al-Qenaie found that this phonological process is not conditioned linguistically but socially and thus the dialect has a functional distribution. The results are summarised below:

• Men used more dialectal features, one being the variant [j] in more informal settings than women who were more innovative in their speech using fewer dialectal features.

⁵⁴ See Al-Qenaie (2011: 254)

- The young age group (18-29) produced [j] in informal settings more than the other groups.
- Sunnis used more instances of [j] than the Šī'is.
- Bedouins residing outside Kuwait City used [j] less than their urban counterparts living in the inner city.
- The use of the allophone [j] as a result of *dzi:m* palatalisation emerged as an urban-related variant.
- Correlation analysis revealed that only age and the type of data were significant. The youngest age group and the least informal setting produced the most occurrences of [j].

In the Levant

Al-Wer (1991) looked at variation in the use of four phonological variables in Jordan, one of which was (d₃), which can be realised as the local [d₃] or the non-local urban [ʒ]. Three towns: Sult, Ajloun and Karak, were the locality of her research. Sult is the biggest town and is only 29 kilometres north-west of the capital Amman. Ajloun is the smallest in terms of size and population and lies 73 kilometres north of Amman. Karak is 124 kilometres from the urbanised capital. She collected data from 116 indigenous Jordanian women using individual and group sociolinguistic interviews. Two social parameters were considered: age and education. Age was divided into four groups: 18-28, 29-39, 40-60 and 61+; education was classified into three categories: uneducated (illiterate or with only 6 years of primary schooling), fairly educated (12 years of formal schooling), and educated speakers (college or university degree holders). Al-Wer's analyses returned both age and education as significant towards the use of the non-local [ʒ]; the younger and the higher the educational level of the speaker the more frequent the use of the urban variant [ʒ] was. In addition, the geographical

location of the towns was returned to be significant with Sult speakers producing [3] at the highest rate followed by Ajloun speakers while Karak speakers scored the lowest in their use of the urban variant [3].

Al-Tamimi (2001) investigated in Irbid, a city in northern Jordan, what is known as Schmidt's colloquialisation rule which changes [dʒ] into the urban variant [ʒ] among rural Jordanian speakers. Based on Al-Wer's (1999) remarks, the researcher labels the variable (dʒ) as a non-salient variable in Jordanian Arabic as its variants [dʒ] and [ʒ] only exist as allophones of the same phoneme. Variation in the use of *dʒi:m* was analysed across four social parameters: social class, gender, education and age. Results showed that female speakers of the higher social class were the innovators towards the use of the urban variant [ʒ]. Education and age were not significant; however, there was a tendency towards the use of [ʒ] being initiated by the younger highly-educated female speakers of the upper class.

5.5 The coding protocol

I coded the variable (d3) for the following internal (linguistic) factors:

Preceding environment. In the first step, I entered the preceding sounds individually. In my pool of data, the preceding sounds were /m, f, b, l, n, r, δ, δ^ç, s, t, d, ∫, dζ, s^ç, t^ç, k, g, h, x, γ, ζ, ħ, ?, a, a:, o, o:, u, u:, i, i:/. Then at the second stage, I re-coded the preceding sounds with respect to their place of articulation motivated by the literature that affrication is triggered in a front vowel environment. Thus in this run sounds were grouped into high front, high back, low front, dorsal, coronal, labial, and pause. The semi vowels /w, j/ were coded for separately. Based on the statistical runs of Rbrul, The sounds were re-grouped as follows:

- i. High front comprising i, i: and j/
- ii. Low front comprising /a, a:/
- iii. Back comprising /w, u, u:, o:/ and the dorsal consonants
- iv. Coronal comprising the coronal consonants and /m, f, b/
- Following environment. At the first stage, I also entered the following sounds individually which were /m, b, f, s, t, l, r, t^c, f, dz, z, d, n, ð, k, g, ħ, S,
 ?, γ, w, j, i, i:, a, a:, e:, o:, u, u:/. Then I re-coded them with respect to their place of articulation into labial, coronal, dorsal, high front, mid front, low front, high back, mid back, and pause. The semi vowels /w, j/ were coded for separately. In the last run, based on Rbrul statistics, the behaviour of some sounds showed similarity, then I regrouped the sounds into the following groups:
 - i. High front comprising /i, i:, j/
 - ii. Non-high front comprising /a, a:, e:/
 - iii. Back comprising /w, u, u:, o:/ and the dorsal consonants
 - iv. Coronal comprising the coronal consonants and /m, f, b/

In both the preceding and following environments, I excluded pause as there were not sufficient tokens.

3) Gemination: different views on how to treat geminate sounds have been proposed. For instance, Delattre (1971) views gemination as a process of consonant re-articulation in that the first sound occupies a syllable coda, and the second is re-articulated as the onset of the following syllable. He claims that geminates are different from long consonants since geminates have two phases in their articulation. Other researchers, on the other hand, see gemination as long consonants (Ladefoged, 2001). Based on these definitions, for the purpose of coding for germination, I opted to consider both arguments in that sometimes geminates were treated as a segment of two identical sounds and sometimes as long consonants. Consider the following two examples from Medini Arabic to explain the reason why geminates were dealt with in this way:

- i. $\hbar a d g d g$ 'pilgrimage', in this word the geminate /dg/ is considered as a long consonant since the articulation of the geminate consonant occurs within the coda of the same syllable. Such geminates were counted as one token in the excel sheet.
- ii. *ar-ridz.dza:l* 'the man' in this word the geminate /dz/ was dealt with as a segment of two identical consonants. Here the geminated /dz/ occurs in two different syllables. The first /dz/ is the coda of the first syllable while the second /dz/ is the onset of the following syllable. Such geminates were considered as two tokens in my excel sheet.

However, finally I had to exclude gemination as a linguistic factor since there were not enough tokens in the pool of data.

- 4) The number of syllables of tokens in which the variable *dzi:m* occurred was coded as: monosyllabic, disyllabic and polysyllabic.
- 5) Stress was coded depending on whether the variable occurred in a stressed or unstressed syllable.
- 6) Syllable structure was coded depending on whether the variable occurred in a light (CV), heavy (CVV, CVC) or superheavy (CVVC, CVCC) syllable.
- 7) The syllable position was coded depending on whether the variable occurred in onset or coda position.

As for the social factors, I coded the variable *dzi:m* with respect to the following:

- 8) Gender: male and female
- 9) Age group: young, adult, middle-aged, old
- 10) Community: Bedouin and urban

The following is a sample of the coded linguistic environments of tokens taken from my data:

Dep v	Tokens	Preceding	Following	Syllable	Stress	Syllable	Syllable
		sound	sound	number		structure	position
dз	Sadzabatni	low front	non-high front	poly	unstressed	light	onset
3	?aʒlis	low front	coronal	di	stressed	heavy	coda
क्	jidzibu:li	high front	high front	poly	unstressed	light	onset
दे	dza:t	coronal	non-high front	mono	stressed	super-heavy	onset
3	tarzaS	coronal	non-high front	di	unstressed	heavy	onset

Table 5.1: A sample of the coding protocol of the linguistic factors

Ingham (1971:277) gave a description of the distribution of the sound *dzi:m* and its allophones in Meccan Arabic. He pointed out that this phoneme shows affrication in the following environments:

- In initial-syllable position, e.g. dzo: 'they came', yi.dzi. 'he comes'
- In word final position, e.g. burd; 'tower'
- Before the voiceless fricatives /h, ħ, s, f/, e.g. *?adʒ.sa:m* 'parts', *?adʒ.hal* 'more ignorant', *dʒi:m* is released with slight affrication

- Preceding voiced continuants like /m, w, r/, dʒi:m is also affricated but a schwa [ə] is inserted between [dʒ] and the following sound as in *?adʒəmal* 'more pretty', *?adʒəwiba* 'answers'
- *dʒi:m* followed by the plosives /b, d, t/ can occur either as [dʒ] or as [ʒ], as in *?iʒba:r* 'a compulsion'. This linguistic constraint was originally described by Sibawayh (see section 5.1)
- Before the dentals /l, z, n/ it is an unreleased voiced palate-alveolar stop [j] as in *Pajlis* 'I sit'.
- The affricate [dʒ] alternates with /j/ the voiced frictionless palatal continuant in initial position as in *dʒami:l* versus *jami:l* 'beautiful'

Although Meccan Arabic and Medini Arabic share a lot of similarities, the above-mentioned distribution of the sound *dzi:m* does not entirely apply to Medini Arabic. From my pool of data, I discovered a few differences; the following are a few examples.

- In initial syllable position [dʒ] alternated with [ʒ] as in dʒidda versus ʒidda 'Jeddah', or ħa:dʒa versus ħa:ʒa 'something'
- In word final position, variation also occurs as in *mitzawwidz* versus *mitzawwiz* 'he is married'
- *dʒi:m* showed variation when it was followed by /h/ as *?aʒhiza* or *al-?adʒhiza* 'instruments'; or at morpheme boundaries as in *?a:ladʒ.ha* versus *?a:laʒ.ha* 'he treated her'
- dʒi:m was not found to be preceded or followed by some sounds within the word, e.g.
 /s/ or /ħ/ but only at word boundaries as in zo:3 sami:ħa 'Sami:ħa's husband'

- Before voiced continuants (r, z, m, etc.) dzi:m also showed variation in that it was affricated as in *tadzruba* 'an experience' or it was deaffricated as in *jizrufu* 'they shovel', or as in *mazmu:Sa* 'a group' versus *tidzmad* 'become frozen'
- Before the plosives /d, t/, dʒi:m was mainly realised as a fricative as in maʒd 'glory' or *Patxarraʒt* 'I graduated'; however, before /b/ [dʒ] alternated with [ʒ] as in nidʒbid 'we collect water from the well', wadʒbat 'a meal' versus maʒburi:n 'we were forced'
- The variant [j] in initial word position did not appear in my data of Medini Arabic except for in the word masjid 'mosque' by the Bedouin speakers where [j] occurred in syllable-initial position.

5.6 The results

In this section I present the quantitative analysis of the data, using Rbrul. Due to the existence of two communities, the analysis will be discussed in three parts: the urban community, the Bedouin community, and the urban and Bedouin communities. Rbrul analyses will be displayed in tables. A factor weight above 0.5 favours the application value (which in this case is the deaffrication of [dʒ]) whilst a factor weight below 0.5 disfavours the application value. The log-odds express the same information but here a positive value favours application whereas a negative value disfavours application. A log-odd value of 0 or a factor weight of 0.5 means neutrality.

5.6.1 The urban community

Table 5.2 shows Rbrul results (multivariate analysis) with respect to the internal (linguistic) and external (social) factors for the urban community:

				$R^2 = 0.375$
Age group (P<4.03e-	39)			
Young	1.039	265	0.626	0.739
Adult	0.400	267	0.536	0.599
Middle-aged	0.264	290	0.476	0.566
Old	-1.704	273	0.150	0.154
Preceding sound (p<	(1.11e-25)			
Factor	Log-odds	Tokens	[3] mean	Centered factor weight
High front	0.727	270	0.619	0.674
Back	0.422	162	0.525	0.604
Low front	0.196	346	0.514	0.549
Coronal	-1.345	317	0.183	0.207
Following sound (p<	5.22e-06)			
Coronal	0.902	116	0.733	0.711
High front	-0.110	328	0.479	0.473
Back	-0.367	202	0.401	0.409
Non-high front	-0.426	449	0.367	0.395
Stress (P<0.015)				
Unstressed	0.18	450	0.507	0.545
Stressed	-0.18	645	0.403	0.455
				Grand mean 0.446

Table 5.2: Rbrul results of the correlation between the use of [3] and the independent variables among the urban community speakers

Analysing the urban group behaviour in their use of dgi:m, Rbrul runs, with the fricative [3] as the application value, returned age as the most significant factor (p<4.03e-39) out of all the internal and external factors considered in the present study. In contrast, gender was not returned as a significant factor. From the figures displayed in the table above, we can claim that the younger the speakers the more they use the innovative [3] variant. The

youngest age group (18-29) used [3] 62% whereas the oldest age group (over 60s) used it 15%. Indeed, from the log-odds and centered factor weights, it is clear that the oldest age group disfavours the application of the innovative fricative form while the other three younger age groups favour its application. Moreover, another remark we can make regarding the middle-aged, adult and young age groups is that there is a steady increase in the use of the new variant 48%, 54%, and 63%, respectively.

Concerning the linguistic factors, the preceding sound was returned to be the most significant (p<1.11e-25). In this environment, [3] is favoured after high front vowels and /j/ (FW 0.67); back sounds (FW 0.60) and low front vowels (FW 0.55). These linguistic environments favour the use of the fricative variant. However, when the variable is preceded by a coronal (the coronal consonants and /m, f, b/), application of [3] is disfavoured and might only occur 18% with a factor weight of 0.207.

The third significant factor (P < 5.22e-06) is the following sound. We can see that [3] is favoured when it is followed by a coronal and is likely to occur 73% with a factor weight of 0.711. In contrast, the fricative variant is disfavoured before: high front vowels (FW 0.47); back sounds (FW 0.41) and non-high front vowels (FW 0.39).

With respect to stress, Rbrul returned it as the least significant factor (P<0.015). When the variable occurs in an unstressed syllable, use of [3] is favoured (FW 0.54) and occurs at a rate of 50% while stressed syllables disfavours [3] (FW 0.45) and occurs at a rate of 40%.

5.6.2 The Bedouin community

The Bedouin dialect of the Harb tribe was described by II-Hazmy (1975) who divided his description into two: the Hiğāzi and the Northern Central group. The Hiğāzi Harb tribe lived near the coast of north Rabigh on the Red Sea up to the west of Medina while the Northern

Central group resided inland in the area between al-Qaṣīm and the east of Medina. As stated before, my data consists of interviews with Bedouins from the Northern Central group whose dialect is a sub-variety of Najdi Arabic (Ingham 1994). Il-Hazmy (ibid) found that *dzi:m* exhibited different realisations among his 40 Harb male only informants (26 speakers from the Hiǧāzi group and the remaining 14 from the Northern Central region). The study predominantly focused on speakers aged above 35 as these speakers were believed to maintain the traditional form. Most of Il-Hazmy's informants were settlers but a few nomads were included. Dialectal Harb features distinguishing the Hiǧāzi group from the Northern Central group were discovered. Features of the latter group are listed below:

- Affrication of the sounds /k/ and /g/ to [ts] and [dz] respectively, was widespread, which I found to some extent in my data especially in the older women's speech.
- The main realisation of *dzi:m* is the palato-alveolar affricate [dʒ]; however, other pronunciations such as [g^j], [d^j] and also [j] in certain words were possible, such as *masjid* 'mosque' or *fijar* 'trees'.

According to my data, the realisation of dzi:m is one of the commonest features that distinguish between the two main clans of the Harb tribe: Banū Sālim⁵⁵ and Banū Masrūh⁵⁶.The traditional variant of dzi:m for Banū Sālim, especially the clan of al-Ruḥayli, is the fricative [3]⁵⁷. My pool of data from this clan supports this conclusion. In contrast, the traditional variant for Banū Masrūḥ, especially the clan of al-ʿŌfi, is the affricate [dʒ] whilst [3] is the innovative form. Table 5.3 displays the correlations of the use of dzi:m and the independent (linguistic and social) variables by the Bedouin community.

⁵⁵ considered to be from the Hiğāzi group

⁵⁶ considered to be from the northern central group

⁵⁷ This is based on clarifications from a native speaker of this clan and on my data

				$R^2 = 0.462$
Age group (P<3.62e-	62)			
Young	1.820	301	0.704	0.861
Adult	0.601	308	0.497	0.646
Middle-aged	-0.459	227	0.304	0.387
Old	-1.962	240	0.092	0.123
Preceding sound (P<	1.77e-15)			
Factor	Log-odds	Tokens	[3] mean	centered factor weight
High front	0.687	284	0.539	0.665
Low front	0.271	361	0.479	0.567
Back	0.164	130	0.492	0.541
Coronal	-1.122	301	0.219	0.246
Following sound (P<	1.91e-07)			
Coronal	1.057	118	0.745	0.742
Back	-0.232	153	0.444	0.442
High front	-0.291	337	0.418	0.428
Non-high front	-0.534	468	0.338	0.37
Gender (P<0.000212))			
Female	0.292	524	0.462	0.572
Male	-0.292	552	0.388	0.428
Stress (P<0.00116)				
Unstressed	0.256	418	0.488	0.564
Stressed	-0.256	658	0.383	0.436
				Grand mean 0.424

Table 5.3: Rbrul results of the correlation between the use of [3] and the independent variables among the Bedouin community speakers

In this run, Rbrul also returned age as the most significant factor (P < 3.62e-62) out of all the independent factors under investigation. It is shown in table 5.3 that both the oldest group

with 0.9% and a factor weight of 0.123 and middle-aged group with 30% and a factor weight of 0.387, disfavour the variant [3]. On the other hand, the adult group with 50% and a factor weight of 0.646 and young group with 70% and a factor weight of 0.861 favour the innovative variant. Thus, in the Bedouin community, only the young and adult age groups favour deaffrication while in the urban community the new variant [3] was favoured across the three age groups: young, adult and middle-aged. It is also worth noting the sharp increase in the use of the new variant by the youngest Bedouin speakers at 70%. Indeed, as we can see in table 5.3, there is a large gap between the four age groups in their use of the sound which suggests that the change from [dʒ] to [ʒ] is a relatively new and vigorous change.

As for the linguistic factors, results showed that the same lingustic constraints, in the same order as with the urban community, operate with respect to the Bedouin community. More specifically, following age, Rbrul returned the preceding sound as the second most significant (P<1.77e-15). Three linguistic environments favour the use of the fricative: after high front vowels and /j/ (FW 0.66); low front vowels (FW 0.57), and back sounds (FW 0.54). Nonetheless, when the variable is preceded by a coronal, [3] is disfavoured and occurred only 22% with a factor weight of 0.246.

As for the third most significant factor which is the following sound, [3] is only favoured when it is followed by a coronal at 74% with a factor weight of 0.742. However, [3] is disfavoured when it is followed by: back sounds (FW 0.44), high front vowels and /j/ (FW 0.43) and non-high front vowels (FW 0.37).

With respect to gender, in this case Rbrul returned it as a significant factor (P<0.000212). Moreover, table 5.3 shows that the female speakers use the new variant [3] at 46% (FW 0.57) compared with 39% usage by the male group (FW 0.43).

Stress is also returned significant in this case (P<0.000116). When the variable occurs in unstressed syllables, [3] is favoured (FW 0.56) and used at a rate of 49% while it is disfavoured in stressed syllables (FW 0.44) and used at a rate of 38%.

5.6.3 The use of d3i:m by both communities

In this run, 'community' was factored in as an independent variable. The results are displayed in table 5.4.

Grand mean 0.434				$R^2 = 0.404$
Age group (P<3.26e	-95)			
Young	1.404	566	0.668	0.803
Adult	0.460	575	0.515	0.613
Middle-aged	-0.065	519	0.399	0.484
Old	-1.799	515	0.122	0.142
Preceding sound (P-	<1.97e-37)			
Factor	Log-odds	Tokens	[3] mean cent	ered factor weight
High front	0.670	558	0.573	0.661
Back	0.339	292	0.510	0.584
Low front	0.179	707	0.496	0.545
Coronal	-1.188	618	0.201	0.234
Stress (P<7.75e-05)				
Unstressed	0.21	868	0.498	0.552
Stressed	-0.21	1307	0.392	0.448
Following sound (P-	<0.000162)			
Coronal	0.692	235	0.740	0.666
High front	-0.048	667	0.447	0.488
Non-high front	-0.319	917	0.352	0.421
Back	-0.325	356	0.419	0.42
Gender (P<0.00551))			
Female	0.145	1102	0.471	0.536
Male	-0.145	1073	0.396	0.464
Community (P<0.00823)				
Urban	0.138	1095	0.446	0.534
Bedouin	-0.138	1080	0.422	0.466
Variable position (P<0.0356)				
Coda	0.238	372	0.656	0.559
Onset	-0.238	1803	0.388	0.441

Table 5.4: Rbrul results of the correlation between the use of [3] and the independent variables among the urban and Bedouin community speakers

In this run of the whole community, Rbrul also confirmed that age is the most significant factor (P< 3.26e-95). Table 5.4 shows that the innovative variant [3] is preferred by both the young group with 67% and a factor weight of 0.803 and the adult group with 51% and a factor weight of 0.613. Conversely, the middle-aged group, with 40% and a factor weight of 0.484, and the oldest group, with only 12% and a factor weight of 0.142, disfavour [3].

After age, the preceding sound was returned significant (P < 1.97e-37). Three linguistic environments favour the use of the fricative: after high front vowels and /j/ (FW 0.66), back sounds (FW 0.58), and low front vowels (FW 0.54). However, when the variable is preceded by a coronal, [3] is disfavoured and occurred only 20% with a factor weight of 0.23.

The third significant factor (P < 7.75e-05) is stress. When the variable occurs in an unstressed syllable, [3] is favoured (FW 0.55) whilst a stressed syllable disfavours [3] (FW 0.45).

As for the fourth significant factor (P<0.000162) which is the following sound, we can see that [3] is only favoured before a coronal at 74% with a factor weight of 0.67. On the other hand, [3] is disfavoured before: high front vowels and /j/ (FW 0.49), non-high front vowels (FW 0.42), and back sounds (FW. 0.42).

Regarding gender, Rbrul returned it as the fifth significant factor (P < 0.00551). Female speakers favour the incoming variant [3] at a rate of 47% with a factor weight of 0.536 while the male speakers disfavour it by 40% and a factor weight of 0.464.

As for community, it was returned as significant (P < 0.00823). Urban speakers are ahead in implementing the new variant (45% with a factor weight of 0.534) of their Bedouin counterparts (42% with a factor weight of 0.466).

Concerning the variable position, Rbrul returned it as the least significant factor (P< 0.0356). In coda positions, the fricative is favoured (66% with a factor weight of 0.559) while in onset positions [3] is disfavoured (39% with a factor weight of 0.441).

The R^2 values found in the right-hand corners of the tables showing Rbrul results, represent the proportion of variation explained by the model. Thus, the analysis for Bedouin speakers ($R^2 = 0.462$) explains more of the variation than that of urban speakers ($R^2 = 0.404$).

5.7 Interpretations of the results

The results showed that both communities, urban and Bedouin, behaved quite similarly in their use of *dzi:m* despite the fact that their roots, culture and dialects are quite distinct. In this section, I provide interpretations of the quantitative results under two headings: the linguistic constraints and trajectory of change; and the social constraints.

5.7.1 The linguistic constraints and trajectory of change

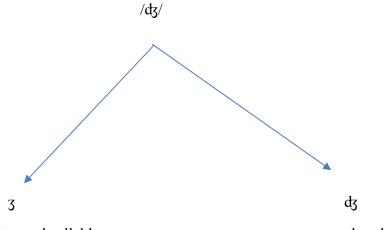
As was explained (see §5.1 & §5.2), the affricate realisation of *dzi:m* descends historically from a velar stop; and based on Bhat's description (1978) of the cover term 'palatalisation'⁵⁸ this change from an abrupt release to a delayed release might have happened through the processes of tongue fronting and spirantisation. These two processes which might affect velar stops, is a well-documented development in many of the world's languages (Hock 1986; Lass 1997; Bhat 1978; Hogg 2011; Laker 2007).

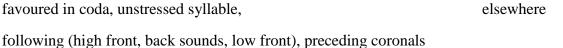
The change affecting the affricate realisation of dgi:m in Medina seems to be the end result of this historical process (of tongue fronting of velars /g/ (*g)). The results of this research show that lenition (in the form of spirantisation) of the affricate [dg] is most favoured when the variable is preceded by high front vowels (FW 0.66), and followed by

⁵⁸ Palatalisation is explained at the beginning of the chapter

coronal sounds. The direction of change recorded in my research (affricate \rightarrow fricative) matches universal tendencies, and the linguistic constraints are broadly in line with those recorded in similar developments in other languages.

The change affecting this variable in Medini Arabic appears to lead to the emergence of allophony whereby the incoming variant, [3], is allocated to specific environments. In other words, synchronically in Medini Arabic $/d_3/$ has two allophones, as illustrated below.

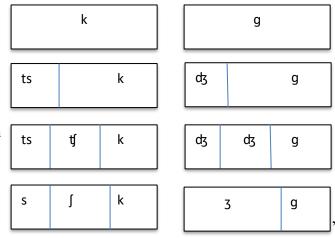


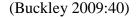


While it is not possible to predict precisely how stable the conditions constraining the use of the two allophones are, the results with respect to the patterning of the age variable (more below) suggest that /dʒ/ in Medina is a case of 'change in progress', viz. we anticipate that this change will progress further towards the fricative variant. As it progresses, the use of the incoming variant will expand to environments which, currently, favour the affricate variant. A similar case of progression is reported by Buckley (2009) in his account of palatalisation in Gallo Romance. Buckley proposed a two-stage development of this case, illustrated in the schema below.



First Palatalisation second-third century Second Palatalisation fifth-sixth century Deaffrication thirteenth century





He explains that First Palatalisation was phonetically conditioned, triggered by following front vowels, while Second Palatalisation was also triggered by a following central vowel [a] (that is, as the process progressed the linguistic constraints were broken, or the environment in which palatalisation occurred was expanded).⁵⁹

As mentioned above, the results of this research show that lenition (in the form of deaffrication) of the affricate [dʒ] is most favoured when the variable is preceded by high front vowels, followed by coronal sounds; and in unstressed and coda positions. With respect to the preceding environment, these findings support the generalisation that lenition (in the form of deaffrication) is most strongly favoured in this environment. With respect to the following environment, the category of 'high front' slightly disfavours lenition; it is worth remembering here that in this case the change identified is deaffrication as opposed to affrication which is mostly favoured before high front and semi vowels.

⁵⁹ Other cases where more than one variant is reported to be in use include: Cairene Arabic; Haeri (1997) reported two degrees of palatalisation of the dental stops: strong, which produces an affricate variant, and weak, which produces a fricative variant. And Old English /g/ (an allophone of OE / χ /) first palatalised to [J], and eventually either merged with [j] or assibilated (Hogg 2011, Laker 2009)

In order to investigate the behaviour of the preceding coronals which disfavour [3] and the following coronals which favour [3] (FW 0.67), the crosstabulations of the use of [3] and the preceding and following sounds are presented in tables 5.5 and 5.6.

Both communities		
Preceding sound	%[3]	Tokens
High front	57%	553
Back	51%	292
low front	49%	712
coronal	20%	618
		Total number of tokens 2175

Table 5.5: Cross-tabulation of the use of [3] and the preceding sound by the whole community

Both communities			
Following sound	%[3]	Tokens	
Coronal	74%	234	
High front	47%	668	
Back	42%	356	
Non-high front	35%	917	
		Total number of tokens 2175	

Table 5.6: Cross-tabulation of the use of [3] and the following sound by the whole community

These results can be attributed to the dissimilatory effect of the phonetic context. Alderete and Frisch defined dissimilation as "the systematic avoidance of two similar sound structures in relatively close proximity to each other" (2007: 379). They examined dissimilation across a number of languages, including Arabic (citing Greenberg (1950) and McCarthy (1994)), where "homorganic consonant pairs are significantly under-represented in roots" (2007: 381). Furthermore, they specified that coronals are affected by dissimilation "as coronals co-occur with a relatively high frequency if they are not in the same manner classes" (2007: 381). Consequently, the sound change, whereby [dʒ] is deaffricated before coronals could be considered as a case of dissimilation in the manner feature by loosing the obstruction in the vocal tract in the articulation of the fricative variant. Indeed, dissimilation is triggered when the variable is followed by a coronal as in this environment the majority of tokens occur within the same morphological domain of the stem, a condition on the application of dissimilation, as in *nijlis* 'we sit', *taʒruba* 'an experience', *?aʒnabi* 'a foreigner', *jiʒri* 'he runs', and so on. Moreover, out of the 234 tokens, [ʒ] occurred in the coda position in 233 tokens and this environment was found to favour the fricative variant (FW 0.56). In contrast, dissimilation is not triggered when [dʒ] is preceded by a coronal as the two homorganic consonats happen to fall within two morphological domains, that is, the prefix and the root as in *al-dʒi:ra:n* 'the neighbours', *t-dʒahhiz* 'she prepares', *n-dʒib-lak* 'we bring you', *nit-dʒammaG* 'we get together' and so on. It is also worth noting that in this linguistic environment, the variant [dʒ] occurred in the onset position, which was shown to favour the affricate variant, in 611 out of the total number of tokens: 618.

With respect to stress, results revealed that [3] is favoured in unstressed syllables (FW 0.55) while it is disfavoured in stressed syllables (FW 0.45). These results are in line with Ladefoged's description of stressed syllables, who explains that:

"A stressed syllable is usually produced by pushing more air out of the lungs in one syllable relative to others. A stressed syllable thus has greater respiratory energy than neighbouring unstressed syllables."

(Ladefoged 2001: 93)

Thus, stressed syllables stimulate the presence of the affricate variant [dʒ] which can be described as a complex sound consisting of a stop followed by a fricative requiring more energy to produce than its weaker allophone [3].

Recall (§ 5.2) Kaye's claim that Medini has a realisation [dⁱ]. II-Hazmy (1975) in his description of Bedouin Harb Medini maintains that [dʒ] is the predominant realisation among this group but also attests tokens of three further realisations: [g], [g^i] and [d^i]. His data were collected between 1972 and 1973 from male speakers who were 35 years old or more. Forty years later, in 2013, I collected data and only found the affricate [dʒ] and fricative [3] to be variants of dgi:m among speakers of this group. If we were to consider the youngest speakers from II-Hazmy's (1975) study, they would now be 75 years old and could be in my oldest age group: 60 plus. Assuming the realisations recorded by II- Hazmy (and Kaye) used to be present in Medini but have become extinct, the recent changes can be represented as follows:

 $[g] > [g^j], [d^j] > [d_z] > [z]$

Further, following Buckley's terminology, these developments may be conceptualised as:

First Palatalisation ($*g > [\acute{g}]$)

Second Palatalisation ($[g] > [g^j], [d^j]$)

Affrication $([g^j], [d^j] > [d_z])$

Lenition/deaffrication/assibilation ($[d_3] > [3]$)

The term lenition has been defined by a number of phonologists, one of whom is Kirchner. He states:

"... the term "lenition" (< L. *lenis*, 'weak') refers to synchronic alternations, as well as diachronic sound changes, whereby a sound becomes "weaker," or where a "weaker" sound bears an allophonic relation to a "stronger" sound". Thus, when it affects consonants, it leads to "some reduction in constriction degree or duration."

(Kirchner 1998:1)

Various types of lenition have been identified, one of which is "spirantisation, or reduction from a stop (or affricate) to a fricative or approximant continuant" (Kirchner 1998:1 and 2004:313). Indeed, this is the process attested in MA and is currently in progress as demonstrated in my data.

Lenition does not have a clear-cut definition or scope as linguists do not agree on the different processes that can be labelled under this term. Lass (1984), for instance, considers affrication of stops as a type of lenition whereas Kirchner (1998) does not. Lenition is a natural consonant weakening process and once it has started, rarely does the sound concerned regain strength. The Sonority Hierarchy Principle⁶⁰ according to which sounds become weaker as we move to the right, as illustrated below, orders lenition:

Stops \rightarrow affricates \rightarrow fricatives \rightarrow approximants \rightarrow zero

strongest >> weakest

This scale of weakening has had a great impact on consonants and has led to sound changes in a number of languages, usually from a stronger to weaker direction. It is clear that lenition as demonstrated above is the process that has affected Arabic dzi:m historically and is affecting the traditional Medini form synchronically⁶¹.

Kirchner (1998, 2004), Lass (1984), Hart (2010) and Choi (2014), among others, showed that lenition is language specific. However, there are a number of linguistic environments which have frequently been shown to either trigger or inhibit it; intervocalic positions, coda and final positions motivate lenition whereas word-initial positions and onset positions especially in a stressed syllable, constrain its application. Now let us recall the Rbrul results to see where the occurrence or non-occurrence of lenition is significant

⁶⁰ See Lass (1984)

⁶¹ The chronology, proposed here, of the development of Arabic dgi:m can be taken as evidence against Blanc's and Hary's suggestion that Cairo [g] is an innovation.

according to my data and how they correspond to the above-mentioned linguistic constraints. Lenition is favoured in the following environments when $d_{i:m}$ is:

- preceded by a high front, a back sound or a low front
- followed by a coronal
- in coda-positions
- in unstressed syllables

while it is disfavoured in:

- stressed syllables
- onset positions

My findings reveal that 3), 4), 5) and 6) are in line with the literature on lenition. In my analysis, I tested both the preceding and following linguistic environments in the form of: C-V, V-C and V-V. However, this linguistic factor was not returned as a significant factor, and thus cannot be considered to be a predictor of lenition in Medini Arabic.

5.7.2 The Social factors

The influence of Jeddah

Rbrul results reveal that the linguistic variable (d3) is undergoing change from an affricate to a fricative, the examples illustrated above of parallel developments in other languages suggest that such a change may at the same time be internally motivated. In the context of discussing the extra-linguistic factors that motivate this change, the first issue I would like to raise is the relationship between the development in Medini and the features found in the regional standard, namely the dialect of the cosmopolitan city of Jeddah. As we have seen in the dialect descriptions in Chapter Two, neither of the Medini varieties contains the fricative variant in their grammar. One possibility is that this change was triggered through contact with speakers of Jeddah Arabic. In the Hiğāz province, although Mecca has always been considered the most important religious centre, Jeddah is undoubtedly the most important commercial capital in Saudi Arabia due in part to its geographical location on the Red Sea. People of Medina, urban and Bedouin, consider Jeddah as a place of culture and symbol of modernity. It is the place that they head for to access better education, entertainment, shopping and healthcare. The Jeddah natives are considered 'refined', 'cultured', 'open-minded', 'liberated', etc. It is no surprise therefore that the Jeddah dialect has social prestige in the region as a whole, and its dialect seems to function as the local regional standard.⁶²Linguistic innovations diffuse from Jeddah outwards. Many studies around the world record diffusion of linguistic features from linguistic centres to surrounding areas, e.g. from Amman to provincial towns in Jordan (Al-Wer 1991); linguistic features originating in London and the southeast have spread to other cities and towns in England (see for instance, Trudgill 1983 & 1986; Kerswill & William 2005, 2000, 1999). In the case at hand, I propose that the change from affricate to fricative is motivated externally (alignment with a prestigious nearby dialect), as well as inernally.

Face-to-face contact with the Jeddah community is important for the adoption of the incoming variant by Medinis (see Trudgill 1986). Contact between urban Medinis and the Jeddah population is regular and frequent. Many urban Medini families have moved to Jeddah for better job opportunities and international education for their children, and for a more cosmopolitan lifestyle in this bustling port on the Red Sea. These families have kept regular contact with their extended families in Medina; they visit home regularly for family occasions and the like. The Medinis who have migrated to Jeddah continue to consider themselves, and are considered by others, to be *madāyna* 'natives' of Medina, and at the same time do not see themselves as 'outsiders' to Jeddah; they are members of both communities.

⁶² See for instance the findings in Al-Essa and Al-Shehri (1993)

Through their frequent visits to their hometown, the *madāyna* of Jeddah become like 'language missionaries', carriers of linguistic innovations back to their home community (see Payne 1980; Llamas (cited in Milroy and Gordon 2003)). Additionally, urban Medinis keep close contacts with the Jeddah community through intermarriage; there are no social restrictions on such intermarriages, unlike intermarriage with the members of the Bedouin social group. The results show that the urban community is ahead in using the incoming variant, which can be explained with reference to the fact that the urban Medinis have more frequent and more intimate contact with the Jeddah community. Further future research is needed to investigate the precise social mechanism through which the Jeddah features are transmitted into the speech of Medinis who in turn disseminate these features in their own native dialect (Medini) and home community (Medina).

A second source which may have helped speakers in Medina to enhance the introduction of the fricative variant into Medina speech community, is that other clans of the Bedouin Harb tribe living there have [3] as their traditional variant. In my opinion, as a native speaker of the urban variety I find this highly unlikely to have had an impact on the change of the urban dialect.

The Bedouin speakers are the most recent arrivals in the city (see Chapter 4 for more details). The extended tribe of Harb reside on the outskirts of Medina, and endogamous marriage among tribe members is the norm. Marriage between the Bedouin and urban communities in Medina is neither common nor encouraged -often it is frowned upon. The contact between the Bedouin and urban groups in Medina happens frequently in formal settings, such as schools, university, and the workplace. Through interaction in the workplace in particular, friendships and more intimate contacts do develop. In terms of residence within the city, there are neighbourhoods known to be inhabited mainly by Bedouin families, (e.g. al-ʿAzīziyya and al-Diʿēṯa), and neighbourhoods where the residents are predominantly from

the urban group (e.g. bīr al-Xātam and al-'Azhari). In spite of this fact, physical social segregation is not the norm since there are numerous neighbourhoods where the two communities reside next to each other, particularly within the environs of the city centre. However, it is no longer the case that in the Medini society generally relations between neighbours are necessarily close simply because they live near each other. The source of innovation in Bedouin speech is very likely to be through contact with the urban group. The urban group has always had a higher social status than the Bedouin group. This is due to a number of factors, including higher educational attainment, exposure to other cultures, living standard and lifestyle amongst other things. In the case of this variable, the target feature, [3], is not only characteristic of the dialect of Jeddah but also of other Bedouin dialects, related to the clan of Banū Masrūh. Therefore, the change in the dialect of the Bedouin group in my research may have originated through contact with two sources: Jeddah (through urban Medini) and other Harb clans (specifically those whose traditional dialects have [3]). Concerning Jeddah as a source of innovation in Bedouin speech, and considering the nature of their contact with native speakers of the Jeddah dialect -generally infrequent and formal, it is plausible to suggest that the Bedouin group access this feature through contact with urban Medinis -rather than directly from the source dialect.

Age and gender

In order to build a more detailed view of the behaviour and interaction of the different age and gender groups of each community and of both communities, the cross tabulation of the use of the new variant are presented in the tables (5.5), (5.6) and (5.7) below.

Urban community				%[3]
Age group	Gender			
	Female	Male	Total	Tokens
Old	10%	20%	15%	273
Middle-aged	46%	49%	48%	290
Adult	56%	50%	54%	267
Young	74%	47%	63%	265
Total	48%	41%	45%	
Tokens	576	519		
		Total	number of toke	ens 1095

Table 5.7: Cross-tabulation of age and gender by the urban community speakers (application value [3])

Bedouin community% [3]							
Age group	Gender	Gender					
	Female	Male	Total	Tokens			
Old	7%	11%	9%	240			
Middle-aged	30%	30%	30%	227			
Adult	56%	46%	50%	308			
Young	84%	57%	70%	301			
Total	46%	39%	42%				
Tokens	524	502					
		То	otal number of t	okens 1076			

Table 5.8: cross-tabulation of age and gender by the Bedouin community speakers (application value [3])

Both communities				% [3]
Age group	Gender			
	Female	Male	Total	Tokens
Old	8%	15%	12%	515
Middle-aged	38%	42%	40%	519
Adult	56%	47%	51%	575
Young	79%	53%	67%	566
Total	47%	40%	43%	
Tokens	1102	1023		
		Total	number of tok	ens 2175

 Table 5.9: Cross-tabulation of age and gender by the whole community speakers

 (application value [3])

The three cross-tabulations above demonstrate explicitly the increase in usage of the innovative feature by the youngest age groups of both communities. It can be stated that the younger the speaker the more they use the koineised pronunciation [3]. In addition, regarding the total usage of [3] it is worth noting that the oldest (15%), the middle-aged (48%), and the adult (54%) age groups of the urban community are ahead of their Bedouin counterparts in the use of [3], (9%), (30%) and (49%), respectively. Surprisingly though, the usage of [3] by the youngest Bedouin age group (70%) exceeds that of the urban participants (63%).

Now let us examine each age group in more detail. Firstly, the oldest urban and Bedouin groups have led a totally isolated life away from each other, so that all contact was within their homogenous community. The oldest members of the urban group grew up at times when this sector of population lived inside the city walls and enjoyed a more socially and financially stable existence around the Prophet's Mosque. In contrast, the Bedouins used to live in al-Ḥinākiyya, farming the land and raising animals; men, women and children shared this intensive labour. This was the life of some of my oldest interviewees who remarked that they would spend all their days outside working in the fields with only their girba 'a leather pouch of water' and a few dates to feed themselves. On occasions, if they were hungry they would even drink milk directly from the goats. Most of these interviewees migrated to Medina after puberty. The middle- aged Bedouin group in my study are their children; they are the first generation born and raised in Medina. This was the onset of contact with the urban group, which was confined to the male members of the Bedouin group who were employed to do menial jobs such as building labourers, drivers and street sellers whereas the women had less contact as they were mostly confined to the home taking care of their families. Education at that time was mainly for male children. However, with the adult and the youngest age group, education became more available and the Bedouin parents were persuaded by the government to send both their male and female children to school. Consequently, communication became more diverse as contact between both communities increased and became routine both in school and at work. As for the linguistic behaviour of the youngest age group, we have seen that the Bedouin speakers are ahead of the urban speakers in using [3]; this could be attributed to their determination and motivation to adopt more urbanised features including language in order to feel more involved and established in the urban city of Medina.

As we have seen, Rbrul returned gender as not significant in the linguistic behaviour of the urban community. However, the cross-tabulation in table (5.7) shows that the adult and young urban female speakers with 56% and 74% usage of the new variant are in advance of their urban male counterparts with 50% and 47% respectively. Therefore, it can be stated that at the urban community level the young urban women are using the fricative variant the most (74%). The results show that it is the middle-aged urban group of both sexes who initiated the change, but only the urban women continued while the male speakers did not progress.

Indeed, results revealed that urban women' s behaviour exhibit a clear advance in each age group, while for men there is only a single gap between the old (20%) and the rest, who are not continuing the change (49%), (50%) and (47%). I believe that the modernity represented by the new variant appeals less to the urban male speakers than the other groups.

With respect to the Bedouin community, gender differences were found to be significant. Some interesting comparisons can be drawn from the cross-tabulations. First, both sexes within this community show a gradual increase in their usage of [3] as the younger they are the more they use the new variant. We can also notice that both genders of the young age group of the Bedouin community are ahead of their urban counterparts. This change, after being initiated by the urban speakers, could be newer and more vigorous and dynamic for them than for their urban counterparts. Second, we observe that young Bedouin men continue to increase their usage of [3] to 57%, while young urban men are lagging behind with 47% usage of the fricative variant. Third, we find that the young Bedouin female speakers are the most innovative group (84%) even ahead of their young urban female counterparts (74%). What could be the explanation for this mechanism of change? Why are the young female Bedouin speakers the most progressive group?

Comments made during the interviews give clues to this pattern of linguistic behaviour. For instance, one young Bedouin woman expressed her admiration of the status the urban women have gained in society as a whole. She commented in her interview that she sees urban women as role models as they are more independent in handling their business affairs and civil matters as well as having more responsibility in making decisions to do with their family lives. This indicates that the life of an urban woman is attractive to the Bedouin women. Linguistic convergence to urban women's speech, or how they are perceived to speak, can be seen as a reflection of this attraction to and admiration of the lifestyle and freedom associated with urban women. By doing so (converging to urban speech), the young Bedouin women simultaneously dissociate themselves from the lifestyle that confined their activities and aspirations, namely that of their mothers and grandmothers. All in all, the young Bedouin women are less conservative and more oriented towards the norms of the urban group because they do not want to fit the stereotype of the traditional Bedouin woman. Thus, the youngest Bedouin female speakers are the 'language missionaries' among their community (see also Trudgill 1984). This is one of the patterns which has been reported in a number of studies. For example, Gal (1978) investigated language change in Oberwart, which before World War 1 was Hungarian but became part of Austria in 1921 at the end of the war and so bilingualism became common among these German and Hungarian speakers. She found that the young Hungarian women's choice of language was based on their refusal to be part of a peasant lifestyle. By using German, the high variety, young women rejected their peasant status and the roles and values it involved.

5.8 Summary of the results

The results of my study have shown that the emergence of a shared Medini Arabic is induced not only by social external factors; namely, age, gender and social group but also by internal linguistic processes such as palatalisation. Concerning the three social factors, age was shown to be the most significant and thus suggesting that deaffrication of [dʒ] seems to be undergoing 'change in progress' with the youngest speakers using the lenited variant [ʒ] the most. Gender differences were not significant in the urban community while in the Bedouin community, they were, with the youngest Bedouin female speakers being ahead of any other group in using [ʒ]. When considering the community as a whole, urban speakers deaffricate more than the Bedouin speakers. I presume that this has occurred through urban Medini speakers having more contact and links to the urban community of Jeddah because of their shared traditions and culture than the Bedouin Medini community. With respect to the linguistic factors, it has been demonstrated that lenition or deaffrication of [dʒ] is mostly favoured after a high front vowel, an approximant /j/, a back sound: /dorsals, w, o:, u:/ and a low front: /a, a:/. The lenited variant [ʒ] occurred most often before /coronals, f, m/. The affricate variant [dʒ] is also undergoing change towards lenition in weak segments such as in unstressed syllables and coda positions. The analysis of dzi:m shows that (dʒ) is indeed undergoing change.

Syllable Structure

This chapter deals with two kinds of sound change which affect the syllable structure that have been documented in other languages around the world. The first is about syncope, which is the elision of a vowel or in some cases, a consonant. The term syncope is derived "from Greek *sunkopé* 'a cutting away', *sun* - 'with'+ *kopé* 'cut, beat'" (Campbell 2004: 33). An example of this could be seen in urban Medini Arabic when a word becomes subjected to resyllabification after the deletion of a vowel resulting in the reduction of its syllables, e.g. *Sa.la.ra:.ħa.tik* becomes *Sa.la.ra:ħ.tik* 'at your convenience'. Another example of syncope which is used in all Arabic dialects is the deletion of the glottal stop /?/ before the definite article in connected speech whereby the coda of the preceding syllable resyllabifies as the onset of the following syllable to occupy the obligatory onset constraint in Arabic, e.g. *nru:ħ. ?al.ma.t^sa:r* becomes *nru:.ħal.ma.t^sa:r* 'we go to the airport'. The second change is about epenthesis where an 'anaptyctic' vowel is added between two consonants in a word resulting in the addition of a syllable, e.g. *dʒi:.ra:n.na* becomes *dʒi:.ra:.na.na* 'our neighbours'.

The chapter is divided into two parts. The first part (§ 6.1- 6.7) will provide an overview of the syllable as described by classical and new grammarians followed by a presentation of the internal structure of the syllable and of the sonority hierarchy. Furthermore, a discussion of two theoretical approaches to syncope and epenthesis and their application in other languages including Arabic dialects will be given. The second part of this chapter (§ 6.8) will present data from the urban and Bedouin communities and the results will be analysed within the framework of the quantitative paradigm.

6.1 Description of the syllable

In this section, I will provide an account of the syllable as it was described by classical and modern grammarians.

6.1.1 The syllable in Arabic as described by classical grammarians

It was thought by modern scholars that the defining characteristics of the syllable were not clearly known by the classical grammarians, but this is not the case. In fact, Sibawayh was aware of the existence of this phonological unit and was able to differentiate between *al-huru:f as-sa:kina*⁶³ *wal mutaharrika*⁶⁴ 'the static sounds and the dynamic sounds' using al-Nasser's terms (1993:21). Sibawayh in his book, as cited in al-Nasser (1993: 20-23), stated that *al-harf* 'the speech sound' is the minimum structure required for any word and since a speech sound cannot occur detached from a *ħaraka* 'vowel'in Arabic, according to al-Nasser, Sibawayh must have been referring to the syllable in its simplest form, i.e. CV. Sibawayh went on to specify the constraints of syllable structure in Arabic as follows:

- i. A static letter (unvoweled) cannot occur in initial position
- A cluster of two consonants cannot occur initially; they only appear in medial or final position
- iii. No syllable or word can begin with a vowel
- iv. No two adjacent static sounds can be found in the same syllable in connected speech except when in pause as in *numt* 'I slept'

In support of Sibawayh's descriptions, al-Farābi⁶⁵ was the first scholar to recognise the necessary components of *al-maqt^caf* 'the syllable' as being composed of a consonant and a following vowel. He also classified syllables into short and long by specifying that the short

⁶³ The sounds that are not followed by a short vowel are static

⁶⁴ The sounds that are followed by a short vowel are dynamic

⁶⁵ Al-Farābi was born in 872 and died in 950 AD. In this thesis I used the 1967 edition of al-Farābi's book *Kitāb* al-mūsīqá al-kabīr

syllable consists of a consonant and a short vowel, CV, whereas the long syllable has a consonant and a long vowel, CVV. Thus, in Arabic any syllable must start with a consonant followed by a vowel; though he did not provide a definition of the syllable, he was the first to describe the syllable structure as it is known in modern linguistics.

Ibn Rušd⁶⁶ known in the West as Averroes (1967) was a pioneer in his approach to the syllable structure. He stated that when humans speak, they need to pause, initially for breath and then to give listeners time to identify the meaning conveyed which is facilitated by syllable structure. He identified that syllables consist of a consonant and a vowel which can be long or short depending on the vowel that follows. According to Shaddād, Ibn Rušd was the first to arabise and use the term as-silābi 'syllabic' from Greek in his description of Arabic syllables and introduce the notion of stress and how its position is affected by the structure of the syllable (Shaddād 2009: 27-29).

Al-Suyūți⁶⁷(1998) wrote:

" ... ومما اختصت به العرب ..: تركُهم الجمع بين الساكنين، وقد يجتمع في لغة العجم ثلاثة سواكن."

... and one of the features that characterised the language of the Arabs (viz. Arabic as used by native speakers) is their avoidance of consonant clusters; while the language of foreigners can allow a cluster of three consonants.

(Al-Suyūți 1998: 324)

In this sentence he explicitly compared the phonotactics of Arabic with other languages.

⁶⁶ Ibn Rušd Born in 1126 and died in 1198 AD. In this thesis I used the 1967 edition of Ibn Rušd's book *Talxīş al-Xaţāba*

⁶⁷Al-Suyūți was born in 1445 and died in 1505 AD. In this thesis I used the 1998 edition of Al-Suyūți's book *al-Muzhir fī 'ulūm al-Luģa wa 'Anwā 'iha*

6.1.2 The syllable in Arabic as described by modern grammarians

Connected speech has been analysed by a group of modern scholars (Anīs 1999; Bišr 2000; Miḥǧāzi 2008, among others). They all agree that connected speech consists of syllables which are divided into: 1) open, ending in either short or long vowels and 2) closed, ending in consonants. The nucleus of the syllable has to be a vowel, the most sonorous sound, and the beginning and the end of the syllable are its margins, which are less sonorous. Syllables are composed of sounds which should be arranged according to the principle of sonority hierarchy. Modern grammarians arranged Arabic sounds in ascending order, from the least to the most sonorous sounds, as follows:

- 1) Voiceless stops, /t, k/
- 2) Voiceless fricatives, /s, f/
- 3) Voiced stops, /d, b, g/
- 4) Voiced fricatives, /z, 3/
- 5) Lateral /l/ and nasals /m, n/
- 6) Trill /r/
- 7) Closed vowels /i, u/ plus /f/
- 8) Open vowels /a/

The concatenation of syllables creates words which can be composed of one, two, or three, and sometimes, although rare, up to seven syllables after the attachment of affixes. In connected speech the demarcation of syllables does not necessarily correspond to single words but it can cross the boundary between two words, e.g. *ʒi:bi:ha min ?al-be:t* becomes *ʒi:.bi:.ham.nal.be:t* 'bring it from home'. In this example, the short vowel /i/ is deleted and /m/ attaches to the preceding syllable and becomes its coda, the glottal stop disappears and is

replaced by /n/ to fulfil the onset constraint⁶⁸ in Arabic. Dialects vary in the type of syllable structure used; by way of illustration urban Medini Arabic favours open syllables in non-final position whereas in Bedouin Medini closed syllables occur in non-final position more frequently.

According to Anīs (1999: 134), Arabic syllable structures can be grouped into five as follows:

A) Open syllables

CV
CVV

B) Closed syllables

CVC
CVVC
CVVC

The first three are the most common and can occur in all environments while the last two are less common and usually occur in word final position or in pause. Thus, from this account we can see that languages differ in the types of syllable structures permissible. For example, in Arabic, onsetless syllables⁶⁹ are not possible as a vowel cannot be in the onset position so a syllable must begin with a consonant; however, in English, syllables can begin with a vowel as in the verb, to arrive.

A closely connected grammatical aspect to syllables is stress. Stress is defined by Bišr

as:

the pronunciation of one of the syllables in a clearer way than the neighbouring syllables

(Bišr 2000: 512)

⁶⁸A syllable cannot begin with a vowel in Arabic

⁶⁹The most dominant constraint

Thus, in Arabic we have both stressed and unstressed syllables. Regarding my study, variation in syncope (deletion) or epenthesis (insertion) in my data only occurred in unstressed light syllables, CV. For example, in *be:.ta.na* 'our house' the second syllable is light and not stressed, therefore, /a/ can be deleted triggering the resyllabification of the word into *be:t.na*.

6.2 The internal structure of the syllable

As was said before, the syllable is a phonological constituent and it is a structural unit dominated by phonotactic constraints which are peculiar to each language and dialect. Certain phonological rules such as syncope and epenthesis influence the syllable structure of dialects, and Medini Arabic is no exception. The syllable is composed of certain constituents that can be represented in the following hierarchical figure as was explained by Fudge (1969), McCarthy (1979a, b), Roca and Johnson (1999), among others:

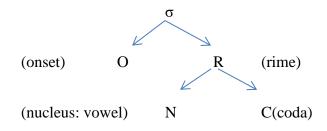


Figure 6.1: The hierarchical constituents of the syllable

The above figure consists of one syllable σ which has two immediate constituents: the onset, a consoant and the rime divided into a nucleus, a vowel and a coda, a marginal consonant. Scholars agree that the nucleus or peak known as [+syllabic] is the obligatory element in any syllable and it is occupied by the most sonorous sound whereas the margins: onset and coda, are [-syllabic] and are less sonorous than the peak (Angoujard 1990; Laver 1994; Belvins 1995). Based on the principle that speech sounds in syllables are arranged according to a sonority scale, phonologists were motivated to search for universal principles in this field of enquiry. The following section will illustrate this concept.

6.3 Sonority hierarchy

One of the most fundamental and useful mechanisms that governs syllable structure is the principle of sonority. The peak (nucleus) of the syllable is produced with the most powerful acoustic energy possible as opposed to its peripheral components; this principle is recognised by scholars as the Sonority Sequencing Principle (Parker 2002). According to Parker (2002:8), the following two statements recapitulate the procedure of the Sonority Sequencing Principle (SSP hereafter):

(a) In every syllable there is exactly one peak of sonority, contained in the nucleus.(b) Syllable margins exhibit a unidirectional sonority slope, rising toward the nucleus.

Many scholars have developed sonority scales for different languages/dialects. One of these scales is the Universal Sonority Scale, developed by Selkirk (1984), Clements (1990) among others, which stipulates the scale outlined below:

Universal Sonority Scale

- 5 Vowels
 - Low vowels
 - Mid vowels
 - High vowels
- 4 Glides
- 3 Liquids
- 2 Nasals
- 1 Obstruents

(cited in Al-Qahtani 2014: 34)

It has been proved that the Sonority Sequencing Principle plays a major role in phonological processes such as syncope and epenthesis. Speakers of different dialects mainly rely on epenthesis to resolve any violations of this principle. For example, in the word *fahm* 'fat', the sequence */*hm/ in coda position violates the sonority hierarchy since */*m/ is more sonorant than */*h/; epenthesis, if it occurs, can be said to be motivated and thus */*a/ is inserted between the consonant cluster */*hm/ yielding *faham*, which conforms to the sonority hierarchy constraint in coda. Concerning syncope, in some cases, an item that conforms to SSP undergoes syncope yielding an output that violates SSP. For instance, consider the following items (taken from my data), both of which showed variation. The word */*ni.ru:h/ 'we go', which in the traditional urban dialect has the structure: *ni.ru:h* varies with the syncopated form *nru:h* 'we go'. In this case, neither the input nor the output violates SSP. In contrast, consider the item */*ni.bi:\$?/ 'we sell', which in the traditional urban dialect has the structure: *ni.nu:h* violates SSP. In contrast, consider the item */*ni.bi:\$?/ 'we sell', which in the traditional urban dialect has the structure: *ni.bi:*? varies with the syncopated form *nbi:*?. In this case, the output [*nbi:*?] violates SSP, since */*n/ is more sonorant than */*b/, and yet this form is not blocked.

6.4 Moraic Theory

A mora is a phonological constituent smaller than the syllable and is regarded as "a unit of phonological weight that measures syllables' heaviness or lightness" (Bernouss 2007: 155). Arabic is one of the moraic languages in that syllables are distinguished in terms of their weight, which regulates stress and timing. According to Hayes (1989), the main assumption of this theory is that each vowel is assigned one mora, long vowels two moras, and consonants in the coda non-final position one mora. Therefore, light CV syllables are monomoraic whereas heavy CVV and CVC syllables are bimoraic; in addition, Arabic syllables cannot be trimoraic. The following figures show how moras are distributed in these syllables; the symbol for the mora is μ :

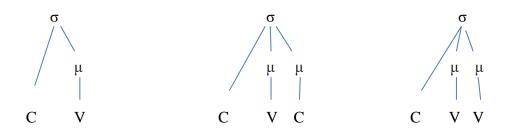


Figure 6.2: Distribution of moras in core syllable structures

In Arabic, stress usually falls on the syllable with the most weight; consequently, if a word is polysyllabic like *ga.lam.na* 'our pen' stress falls on the syllable with two moras, i.e., *lam* which is bimoraic.

In addition, McCarthy (1979b) explained that: 1) only non-final CVC syllables are bimoraic because when they occur finally the last consonant is weightless, i.e. moraless and 2) CVVC and CVCC syllables are always bimoraic whether they occur finally or non-finally. This claim of moraless or 'extrametrical' consonant of CVC syllables in the final position is refelected in stress placement. For example, in the word *sa.baħ* 'he swam', stress falls on the first syllable as the second CVC syllable is not bimoraic but monomoraic due to its last consonant being extrametrical whereas in the word *ri.dzif.na* 'we returned' stress falls on the non-final CVC syllable as it is considered bimoraic. Regarding the superheavy CVVC and CVCC syllables, they are always bimoraic as the last consonant in both is moraless, e.g. in the word *ni.ru:ħ* 'we go', stress is on the superheavy syllable CVVC. A detailed account of moraic theory is beyond the scope of this study; however, this concise introduction will be helpful in the analysis of my data.

6.5 Optimality Theory

Syncope and epenthesis have been explained phonologically from different approaches, one of which is the Optimality Theory (hereafter OT) which was first used as an analytical tool in 1993 (McCarthy & Prince 1993). It consists of three basic elements: the generator (GEN), the

constraints (CON) and the evaluator (EVAL). It is a model of generative grammar based on the principle that any speaker possesses the innate ability to generate an infinite number of outputs from one sole input and then these outputs are evaluated. The motivation for using OT here is that it allows for the analysis and explanation of phonological processes including syncope and epenthesis. The mechanism of OT is composed of three basic constituents:

- The generator feature is in charge of generating outputs (the surface forms) from a given input (the underlying form).
- 2) The constraints consist predominantly of the faithfulness constraints and the markedness constraints. The former is responsible for ensuring that the elements found in the underlying input reoccur at the surface level, i.e., input=output. The latter constraints control the output so that it is well-formed. It has been argued that the interaction between constraints is only applicable at the output level but never at the underlying level (Prince & Smolensky 1993, 1997; Kaeger, 2010).
- The evaluator feature is about the interaction among these constraints in order to choose the optimal candidate (the output).

The constraints are universal but their ranking is language specific in terms of hierarchy and dominance. In addition, they have the capacity to be violated.

The following example is provided to illustrate the system of OT. To generate the optimal imperative form from the input *rfaSha* 'raise it!' A number of constraints come into play in this process; they are listed from the most dominant to the least dominant:

A. A set of markedness constraints:

i. ONSET: A syllable must have an onset⁷⁰

⁷⁰ i and ii were proposed by Prince and Smolensky (1993, 2004).

- ii. *CODA: A syllable must not have a coda
- iii. *COMP-ONS: Onset are simple⁷¹
- iv. *COMP-Cod: Codas are simple
- B. A set of faithfulness constraints, according to which every segment in the input has a correspondent in the output:
 - i. MAX -IO: No deletions (syncope) of segments⁷²
 - ii. DEP -IO: No insertion (epenthesis) of segments

The evaluation of the interaction of these constraints is presented table 6.1:

/rfa§.ha/	ONSET	*COMP-ONS	MAX-C	DEP-C	DEP-V	*CODA
a. rfa.Sa.ha		*!			*	
b. fas.ha			*!			*
ङ c. ?ar.fa§.ha				*	*	**
d. ar.fa§.ha	*!				*	**

Table 6.1: Interaction between the constraints to generate the imperative Par.faS.ha

Here the input form subject to evaluation is /rfaf.ha/ (listed in the top left hand corner). The symbol * in a cell indicates that the output form of that row violates the constraint in that column but is still operable. The symbol *! signposts a disastrous violation and the output is discarded. Output a. fatally violates the second dominant constraint *COMP-ONS as the first syllable is a complex onset C_1C_2 as well as violating DEP-V because of the insertion of /a/ in the second syllable, so this form is discarded. Output b. violates MAX-C because the consonant /r/ is integral to the stem of the verb *rff* and so cannot be deleted and that is why it is not selected. Output d. violates the most dominant markedness constraint ONSET and

⁷¹ iii and iv were proposed by Kager (1999)

⁷² i and ii were proposed by McCarthy & Prince (1995)

therefore can never be considered. Output C is the optimal form because it adheres to the most dominant constraints ONSET » *COMP-ONS » MAX-C. The remaining constraints are at the end of the dominance scale and thus are violable.

6.6 Syncope and epenthesis in languages other than Arabic

Donselaar et al. (1999) carried out a study to assess the effect of vowel epenthesis in Dutch not on the part of its producers but from the perspective of listeners. Dutch words with coda clusters comprising a liquid as its first member and a non-coronal as its second member may have two variants: one without epenthesis and one with the epenthetic vowel /ə/, e.g. *film* ~ *filəm* 'film' or *werk* ~ *werək* 'work'. A number of different experiments were conducted and the results revealed that vowel epenthesis has a facilitator role in Dutch as it makes the identification of /l/ and /r/ easier if followed by a vowel rather than by a consonant. Researchers also pointed out that the mirror image feature of epenthesis, i.e., syncope can render recognition of words more difficult across different languages, such as in English the word *fam'ly* is more difficult to be heard than *family* or in Franch *gal'rie* versus *galerie*.

Fagyal (2000) investigated the addition of a schwa before a pause in word final position whenever the final syllable is stressed. This phenomenon is named *e prépausal* (Hansen 1991; 1997) cited in Fagyal (2000: 151). The insertion of an optional [-ə] is an old feature of 17^{th} century French spoken in Île-de-France, however, it is gaining ground today not only at the end of words which etymologically contain this vowel as in *ville* 'city' or *porte* 'door' but also with words which do not have this final sound, e.g. *bonsoir(ə)* 'good evening'. It has been found that sonority hierarchy is one of the reasons this vowel insertion is motivated in that the more sonorous a consonant is, the more it will be followed by *e prépausal*.

Kavitskaya (2004) investigated syncope from OT in Crimean Tatar, a language spoken in Ukraine, Uzbekistan, and parts of Russia, Romania, and Turkey. A number of constraints have been found to have an impact on syncope: 1) only high vowels are subjected to elision, 2) syncope only occurs if it adheres to the phonotactics of syllable structure, 3) syncope is blocked if it creates an unsyllabifiable consonant cluster and 4) syncope fails to apply if the high vowel is stressed. Furthermore, syncope in Crimean Tatar was treated as a postlexical phenomenon proceeding in natural connected speech and across word boundaries.

Auger (2001) investigated vowel epenthesis in Vimeu Picard from the approach of language variation with the aim of developing an OT analysis capable of generating both categorical and variable outputs as well as predicting the relative frequency of variation. It is a variationist study that was carried out to propose a grammar that can predict vowel epenthesis [e] in word-initial position in Vimeu Picard, a Gallo-Romance language related to French. In this study, only linguistic constraints were considered. As mentioned in the previous section, OT involves the interaction of universal constraints that have language specific ranking. The interplay of undominated or strict constraints with the unranked or adjacent constraints would account for the categorical and variable use of epenthesis⁷³.

As a final remark, Auger's (2001) study has heightened awareness of the possibility that variationists, supported by the advances of theoretical linguistics and particularly theoretical phonology, can develop models of linguistic grammar that can generate variable forms as these do not occur haphazardly.

⁷³ For more details see Auger 2001

6.7 Syncope and epenthesis in Arabic dialects

In this section, I will review the literature on syncope and epenthesis as two phonological processes that have been investigated in dialects similar to urban Medini Arabic as well as in dialects similar to Bedouin Medini Arabic.

6.7.1 Dialects sharing similar characteristics with Urban Medini Arabic

Meccan Arabic

After investigating syncope in Meccan Arabic, Abu Mansour (2011) found that short high unstressed vowels were deleted from open syllables and that is why Meccan Arabic is referred to as a "differential" variety. Cantineau (1939), as cited in Abu Mansour (ibid), divided Arabic dialects into differential and non-differential. The differential dialects are those that delete only high vowels, e.g. Meccan, Egyptian and Lebanese Arabic; the nondifferential dialects are those that delete both high and low vowels, e.g. Syrian and Iraqi Arabic. The researcher studied word-level and phrasal syncope from the approach of OT and found that "the constraints that account for word-level syncope, as well as their ranking, also hold true at the phrase level" (2011: 45). Syncope at the word level appears in the following environments:

- 1) When the suffix of the 3rd person singular feminine at or the 3rd person plural - u are added to the perfect pattern CiCiC as in *liSib*, the second high vowel syncopates and the verb becomes *liS.bat* and not *li.S(i).bat* 'she played' or *liS.bu* and not *li.S(i).bu* 'they played'
- 2) When the 3rd person plural suffix *u* is added to the imperfect paradigm of Form III verbs (see sections A.2.8.1 and B.2.8.1) as in *jifa:rid^c* the objects', the second high vowel syncopates and the verb becomes *ji.fa:r.d^cu* they object' and not *ji.fa:.r(i).d^cu*

When the feminine suffix - a is added to the active participle CaaCiC as in *Sa:lig* 'I am stuck (m.)', the final high vowel syncopates and the word becomes *Sa:l.ga* ' I am stuck (fem.)' and not *Sa:l(i).ga*

However, syncope cannot happen if it creates complex margins or after CC clusters. This is exemplified in the verb *ji.Sal.li.mu* 'they teach'; the two high short vowels /i/ cannot be syncopated because the result would be $jS^{74}all.m^{75}u$. It is worth remembering that Abu-Mansour's analysis of syncope investigated the interaction between the underlying forms and the surface forms but since my study focuses on actual speech my analysis will only be concerned with the surface level.

In addition to syncope at the word level, Abu Mansour (2011) investigated syncope at the phrase level, traditionally divided into two groups: right-hand and left-hand syncope. An example of a right-hand syncope is found in the phonological phrase $2aw.la:.di.s^{c}u.ya:r$ which becomes $2aw.la:.dis^{c}.ya:r^{76}$ 'my children are young' in which the short high back vowel /u/ syncopates and /s^c/ resyllabifies as the coda of the preceding syllable. To illustrate the left-hand syncope I am using this example *ga.bi.lal.Si:d* which becomes *gab.lal.Si:d*⁷⁷ 'before Eid' in which the short high front vowel /i/ syncopates and /b/ resyllabifies as the coda of the preceding syllabilities as the coda of the arranged and explained within the optimality theory. To demonstrate the interaction of some of the ranking constraints, the following list is arranged in descending order with respect to dominance, adapted from Abu Mansour (2011: 48-53):

1) Onset

Arabic does not allow onsetless syllables

⁷⁴ Here the result is a complex onset.

⁷⁵ Although the cluster of three consonants is created at syllable boundary, syncope is still not allowed.

⁷⁶ Syncope happens in the second word of the phrase, the right side.

⁷⁷ Syncope happens in the first word of the phrase, the left side.

2) * Complex (Prince & Smolensky 1993)

Complex margins: onsets or codas are prohibited.

3) *NUCi,u (Gouskova 2003, based on Prince & Smolensky 1993)

The high vowels /i/ and /u/ are prohibited as syllable peaks

4) Max-IO (V) (McCarthy& Prince 1995)

No deletion of vowels

The interaction between these constraints and their ranking decide upon the occurrence or non-occurrence of syncope. Table 6.2 demonstrates how syncope operates within OT.

Input	Onset	*Complex	*Nuc	Max-V
/ka.ta.bu.# ki.taːb /			i,u	
a) kat.abu.ki.taːb	*!		**	
b) ka.ta.bu.ki.ta:b			**	
☞c) ka.ta.buk.taːb			*	*
d) ka.ta.bu.ktaːb		*!	*	

Table 6.2: The ranking of constraints to generate the syncopated form *ka.ta.buk.ta:b* (based on Abu-Mansour (2011: 48)

In the tables showing analysis of OT, the constraints are always arranged from left (the most dominant) to right (the least dominant) constraint. Based on the interaction of constraints in table 6.2, evaluations of the outputs are given as follows:

- Output a) is not a valid candidate as it violates the undominated Onset constraint and the Nuci,u constraint
- Output b) is also not valid because it violates twice the Nuci, u by having two CVs with the nucleus /u/ and /i/ in the third and fourth syllable respectively
- 3) Output c) is the optimal output as it only violates the two lowest ranked constraints
- 4) Output d) is discarded as it violates *Complex constaint in the last syllable and *Nuci, u in the third syllable

Abu-Mansour (ibid) found that word-level and phrasal syncope are both subjected to the interaction of the same constraints. She also added that the classification into left-hand and right-hand syncope is "redundant" but she explained that the application or non-application of syncope is due to the alignment constraints⁷⁸. In other words, she concluded that Meccan Arabic is one of the languages that show right edge effects, i.e. the ALIGN-R is ranked higher than the ALIGN-L. For example, syncope will occur more frequently when a consonant loses its peak and thus becomes the coda of the preceding syllable as her example shows, *ka.ta.bu.ki.ta:b* 'they wrote a book', */i/* deletes and */k/* attaches to the left and becomes the coda as in *ka.ta.buk.ta:b* 'they wrote a book'. In contrast, when a consonant attaches to the right and becomes the onset, syncope occurs less frequently as in *fi.ri.bal.mo:.ja* which either remains the same or occasionally */i/* is syncopated and becomes *fir.bal.mo:ja* 'he drank the water'.

Medini Hiğāzi Arabic

Jarrah (1993: 56) identified the possible syllable types in Medini Hiğāzi Arabic⁷⁹ as shown in bold:

a. CV	<i>fa.dzur</i> 'dawn'
b. CVV	ra:.jiħ 'I'm going' (masculine)
c. CVC	dza. bal 'a moutain'
d. CVVC	<i>ra:</i> ħ 'he went'
e. CVCC	li.bist 'I got dressed' (masculine and feminine)

a. is a light syllable, b. and c. are heavy syllables, and d. and e. are superheavy syllables. The light syllable, CV, is the least marked as it can occur freely in all positions of the word, followed by CVC and then CVV. However, CVVC and CVCC are marked as they are

⁷⁸ See Abu-Mansour (2011).

⁷⁹ As explained in Chapter 2: sections A.2.1.3 and B.2.1.3.

confined only to word-final position. Based on the above list, Jarrah formulated The Onset Template as "O ^[C]", which means, "Onsets are obligatory and clustered onsets are impossible in MHA" (1993: 72).

Jarrah's reseach (1993, 2013) focused on certain phonological rules such as epenthesis and syncope to show the interaction between the underlying forms with the surface forms. Epenthesis in Medini Hiğāzi Arabic either applies to CVCC nouns or across morpheme boundaries. In CVCC nouns, epenthesis is mainly triggered to satisfy the Sonority Sequence Generalisation⁸⁰, e.g. *?idn* becomes *?idin* 'an ear' to break up the rising sonority. Across morpheme boundaries, in verbs, epenthesis occurs between C² and C³ when there are strings of three consonants, e.g. *gul¹t²+l³u* becomes *gultalu* 'I told him' or four consonants, e.g. *gul¹t²+l³+h⁴um* becomes *gultalhum* 'I told them'. The same rule is also applicable in CVCC geminate nouns when suffixes are attached, e.g. *Sam¹m²+n³a* becomes *fammana* 'our uncle'. Epenthesis can also be triggered in CVVC nouns to avoid the occurrence of superheavy syllables in non-final position when the attached suffix begins with a consonant, e.g. *xa:l+kum* becomes *xa:lakum*. The epenthetic vowel in these words is always the low vowel /a/.

Regarding syncope, Jarrah (ibid) explained that it occurs when a high short vowel in an unstressed syllable is deleted only if the outcome is in accordance with the syllable structure of Medini Hiğāzi Arabic. For example, in the verb *ri.kib* 'he rode' the second syllable is not stressed but /i/ in this word cannot be deleted as the outcome will violate the templates of syllable structure. In contrast, when the verb is attached to initial vowel suffixes, e.g. - *u* and - *at*, /i/ in the second syllable is syncopated as in *rik(i).bu* becomes *rik.bu* 'they

⁸⁰ Explained in section 6.3

rode' and rik(i). bat becomes rikbat 'she rode' because the outputs in these cases do adhere to the templates.

With regard to my data, these phonological rules, syncope and epenthesis, were investigated at the surface level since I am investigating variation in connected speech produced in natural contexts. My data of the urban and Bedouin community showed instances of complex onsets as in *tru:h* 'she goes', *nru:h* 'we go' and *lbisna* 'we got dressed', *frihna* 'we were happy', *t^cliSna* 'we went upstairs or outside'. These words have undergone syncope and violated the constraints of syllable structure. In the first two verbs, /t/ and /n/ are used as affixes to show grammatical function and thus violation of the rule of syllable structure occurs at morphological boundaries. In the second set of verbs the occurrence of consonant clusters violates the rule within the stem. I also found that in both the urban and Bedouin variety spoken in Medina, epenthesis in CVVC and CVCC nouns is not necessarily applied when suffixed and thus can result in the occurrence of superheavy syllables in non-final positions as in *ha:l.tin.naf.sij.ja* 'my psychological state' and *Sind.hum* 'they have', respectively.

6.7.2 Dialects sharing similar characteristcs with Bedouin Medini Arabic

Najdi Arabic

Al-Qahtani (2014) investigated syllable structure and syllabification in Najdi Arabic from the perspectives of optimality and moraic theories. He used written data as well as oral data in the form of interviews from 15 male native speakers of Najdi Arabic ranging from 20 to 35 years of age. He classified Najid syllable structure into three types:

- 1) CV and CCV light syllables
- 2) CVC, CCVC, CVV and CCVV heavy syllables
- 3) CVVC, CCVVC, CVCC and CCVCC superheavy syllables

A number of questions were addressed in this research, one of which answered the source of onset clusters in Najdi Arabic. Two processes, namely, syncope and CV metathesis, also known as *ghawa* syndrome, were found to be the reasons behind such formations. Syncope or high vowel deletion creates onset clusters either in the stem, e.g. *bura:d* > *bra:d* 'cold' and *bisa:s* > *bsa:s* 'cats' or in the affix, e.g. *nufu:f* > *nfu:f* 'we see' and *tisi:r* > *tsi:r* 'it becomes'. CV metathesis is derived from Negev Bedouin Arabic where gutturals are not permitted in the coda position and thus epenthesis is used to repair this violation. However, over the course of time, the vowel in the first syllable has been subjected to deletion but the epenthetic vowel has remained, e.g. *gah.wa* > *ga.ha.wa* > *ghawa* 'coffee' (Blanc 1970, Ingham 1994 and Blevin & Garrett 1998 as reported in Al-Qahtani (2014)).

Another question in Al-Qahtani's study (ibid) was clarified with the aim of accounting for the occurrence of non-final superheavy syllables when they are associated with consonantinitial suffixes. Non-final CVVC syllables are permitted in Najdi Arabic through mora sharing, e.g. in *dza:b.hum* 'he brought them', /b/ in the CVVC syllable shares mora with the preceding long vowels and thus the syllables remains bimoraic. In contrast, with non-final CVCC syllables mora sharing is blocked and to resolve the occurrence of a tri-moraic syllable, vowel epenthesis is used. For example, in *bint.hum* where the first syllable $bi^{\mu}n^{\mu}t^{\mu}$ is trimoraic, vowel epenthesis is used as a repairing strategy in order to adhere to the constraint that the maximum syllable weight in Najdi Arabic is bimoraic and thus it becomes *bin.tu.hum* 'their daughter'.

Qassimi Arabic

Al-Motairi (2015) studied syllable structure and related syllabification changes, syncope and epenthesis in Qassimi Arabic, a subtype of Najdi dialects. The researcher classified syllable structure in Qassimi Arabic into two types: the basic and the restricted syllable. The basic types consist of the three unmarked syllable structures: CV, CVV and CVC. The restricted

types are those 1) with initial CC clusters as in dyda:r 'wall' and 2) the superheavy syllables: CVVC and CVCC which are restricted to final position. CVVC syllables occur freely in final position, e.g. *jaf.ra.bu:n* 'they drink' but CVCC syllables only occur in final position if they do not create violation of the sonority constraint⁸¹, e.g. *bint* 'girl' or *ra.samt* 'I drew'. However, superheavy syllables are tolerated in non-final position either 1) through syncope, e.g. *sa:.fi.ri* > *sa:f.ri* 'travel' and *jak.ti.bu:n* > *jakt.bu:n* 'they (m.) write' or 2) as a result of attaching the dative particle *l* followed by a pronoun to CVVC and CVCC verbs, e.g. *ga:l-l-i* > *ga:l.li*. 'he told me' and *gilt-l-i* > *gilt.li*. 'you (m.) told me', respectively.

Alternatively, restricted syllable types in Qassimi Arabic can be restored by means of epenthesis. Firstly, final CVCC syllables which do not conform to the Sonority Sequencing Principle are repaired by epenthesis, e.g. *hadym* becomes *hadym* 'size'. Secondly, non-final CVVC and CVCC syllables are avoided by vowel epenthesis, e.g. *be:.ta.na* 'our house' and *bin.ta.na* 'our daughter'.

Within the framework of OT and Moraic Theory summarized in § 6.4 and § 6.5, Al-Motairi (ibid) justified the occurrence of the other type of restricted syllables, viz. the ones with initial onset clusters. The constraint *COMP-ONS is one of the set of undominated constraints in Qassimi Arabic, so how can the occurrence of onset clusters be accounted for? Constraints from OT supplemented by moraic theory are the basis for the explanation of initial onset clusters. The constraints are: ONSET, *COMP-ONS, *NUCi, R-L/C-L⁸², DEP-V and MAX-V. To clarify, the following example from Al-Motairi (2015: 80) is provided.

⁸¹ See details in Al-Motairi 2015: (37-41)

⁸² The constraint REMOTE-LICENSE-C-Left (R-L/C-L) requires the left consonant in the onset cluster to be licensed remotely (Mahfoudhi (2005) as cited in Al-Motairi 2015)

μ μμ	*COMP-ONS	*NUCi	R-L/C-L	DEP-V	MAX-V
/dzi.da:r/					
μ μμ a) dʒi.daːr		*!			
μμ b) dʒdaːr	*!		*!		*
σ μμ Sc) dz.da:r					*

Table 6.3: Onset clusters in the word dzda:r within OT (source: Al-Motairi 2015: 80)

In table 6.3, the input is /*dyida:r/* consisting of two syllables: light (monomoraic) and CVVC superheavy syllable (bimoraic). Candidate a) is not selected as it violates *NUCi constraint as /i/ is the peak of the first syllable. Candidate b) is ruled out as it violates the undominated constraint which forbids the occurrence of onset clusters and the highly ranked constraint R-L/C-L as the left member of the onset cluster is not licensed remotely by an extra-syllabic semisyllable (McCarthy 2003; Mahfoudhi 2005) and the least dominated MAX-V constraint because of deletion of /i/. Candidate c) is the optimal candidate since it does not fatally violate the highly ranked constraint *COMP-ONS as the left member /dʒ/ of the onset cluster occurs at the left edge of the word and is assigned to an extra-syllablic semisyllable. *NUCi constraint is satisfied since the high vowel /i/ is deleted. R-L/C-L is also satisfied as after the deletion of /i/ the left consonant is licensed remotely by the extra-syllablic semisyllable. DEP-V constraint is satisfied as there was not any vowel insertion. Only the lowest ranked MAX-V constaint is violated after syncope of the short high vowel.

As a final remark, I found it necessary to provide this account on theoretical approaches to syncope and epenthesis in order to understand how these phonological processes can be analysed and function from different pespectives. To the best of my knowledge, this study is the first to investigate syncope and epenthesis from a sociolinguistic point of view in an Arabic speech community. Reviewing the literature on these phonological processes helped me to reflect and decide on possible linguistic constraints that might influence these phonological changes in my research. Based on this, I coded for the resyllabification variable with respect to a number of conceivable linguistic factors, as you will see in the coding protocol section. In the following sections, syncope and epenthesis will be assessed as sociolinguistic variables in modern Medini Arabic.

6.8 The data

In this section the data from both communities will be analysed using Rbrul variable rule program. Data will be presented in the form of tables and a key is provided in section 5.6. This analysis will be different from the (dʒ) variable in that community will not be tested as a variable because the traditional feature for the urban speakers is vowel maintenance as in ra:.ħa.tik 'your convenience' vs. the use of syncope by the younger urban participants as in ra:ħ.tik 'your convenience'. In contrast, for Bedouin speakers the traditional variant is syncope [CC] while the younger generations are going in the direction of epenthesis.

6.8.1 Coding protocol

For the resyllabification variable, I extracted tokens from the urban and Bedouin speech data that could occur either in the form of CV as in *Si.rif.ti* or CC as in *Srif.ti* 'you know' or as in $\hbar o$:.*la.na* vs. $\hbar o$:*l.na* 'around us'. The variants were in the form of [C₁C₂] and [C₁VC₂]. Tokens were coded according to the following factor groups:

 C₁, the first consonant and C₂, the second consonant of the variants: [C₁C₂] and [C₁VC₂]: in the first stage I extracted C₁ and C₂ from the token and then coded them individually, e.g. for *ħo:.la.na* and *ħo:l.na*, I put l+n to show the phonological environment in which syncope and epenthesis could occur. Then I separated C₁ and C₂ into two columns and coded them into three groups according to their place of articulation: dorsal comprising /k, \S , ħ, h, \S , g, x/, coronal comprising /n, d, t, r, t^c, \int , l, dζ, ζ, s, s^c, d^c, z^c/ and labial comprising /m, b, f, w/. In the second stage, I coded C₁ and C₂ according to their manner of articulation: nasal consisting of /m, n/, stop consisting of /k, d, t, t^c, b, g, d^c/, fricative consisting of / \S , \int , ħ, h, dζ, ζ, \S , s, s^c, f, z^c, x/, liquid consisting of /l, r/ and approximant /w, j/. However, after the running of a number of Rbrul models and based on statistical results, I decided to reclassify the sounds for the urban data⁸³into: 1) sonorant comprising the approximant, liquid and nasal sounds and 2) obstruent comprising the stop and fricative sounds while for the Bedouin data, sounds were classified into: fricatives, sonorants and stops⁸⁴. The following tables show examples from the urban and Bedouin varieties, respectively, and of the following stages after sounds have been conflated.

dependent variable	tokens	gloss	variable environment	place of a	rticulation	manner of articulation			manner of articulation (sonorant/obstruent)	
				C1	C2	C1	C2	C1	C2	
cv	Sirifti	you	𝔅+v+r	dorsal	coronal	fricative	liquid	obstruent	sonorant	
сс	or	know,								
	Srifti	don't vou?	𝑘+r							
cv	niru:ħ	we go	n+v+r	coronal	coronal	nasal	liquid	sonorant	sonorant	
сс	or nru:ħ		n+r							
cv	kuwajjisa	good	k+v+w	dorsal	labial	plosive	approxi-	obstruent	sonorant	
сс	or						mant			
	kwajjisa		k+w							
cv	hina:ka or	there	h+v+n	dorsal	coronal	fricative	nasal	obstruent	sonorant	
сс	hna:ka		h+n							
cv	xa:lati or	my aunt	l+v+t	coronal	coronal	liquid	plosive	sonorant	obstruent	
сс	xa:lti		l+t							
cv	tiku:ni or	you	t+v+k	coronal	dorsal	plosive	plosive	obstruent	obstruent	
сс	tku:ni	were	t+k							
cv	s ^s uya:r or	young	$s^{\varsigma}+v+\gamma$	coronal	dorsal	fricative	fricative	obstruent	obstruent	
сс	s ^ç ya:r		$s^{\varsigma}+\gamma$							
cv	gi:dani or	I was	d+v+n	coronal	coronal	plosive	nasal	obstruent	sonorant	
сс	gi:dni		d+n							
cv	bilu:zatha	her shirt	b+v+l	labial	coronal	plosive	liquid	obstruent	sonorant	
сс	or									
	blu:zatha		b+l							

Table 6.4: Examples of the variable from the urban data

⁸³ Crosstabulations, models and explanations are given in Appendix 1.

⁸⁴ See Models of Bedouin data in Appendix 2.

dependent variable	tokens	gloss	variable environment	place of an	place of articulation manner of articulation		articulation	manner of articulation (sonorant/fricative/stop)		
				C1	C2	C1	C2	C1	C2	
cc cv	n∫uːfha or n∫uːfaha	we see her	f + h f + v + h	labial	dorsal	fricative	fricative	fricative	fricative	
cc cv	tgaffil or tigaffil	it closes	t+g t+v+g	coronal	dorsal	plosive	plosive	stop	stop	
cc cv	dʒiraːnna or dʒiraːnana	our neighbours	n + n n + v + n	coronal	coronal	nasal	nasal	sonorant	sonorant	
cc cv	hna or hina	here	h+n h+ v+ n	dorsal	coronal	fricative	nasal	fricative	sonorant	
cc cv	xaːlti or xaːlati	my aunt	l + t l + v + t	coronal	coronal	liquid	plosive	sonorant	stop	
cc cv	ruːħhum or ruːħahum	their spirit	ħ+h ħ+ v+ h	dorsal	dorsal	fricative	fricative	fricative	fricative	
cc cv	kullhum or kulluhum	all of them	k+ l k+ v+ l	dorsal	coronal	plosive	liquid	stop	sonorant	
cc cv	kbaːr or kubaːr	the old	k+ b k+v+b	dorsal	labial	plosive	plosive	stop	stop	
cc cv	mdarris or mudarris	teacher	m+ d m+ v+ d	labial	coronal	nasal	plosive	sonorant	stop	

Table 6.5: Examples of the variable from the Bedouin data

- The underlying syncopated or epenthetic vowels: high back, high front and low front as in as^c-s^cya:r vs. as^c-s^cu.ya:r 'the young', hna:k vs. hi.na:k 'there' and al-saf.ra vs. al-sa.fa.ra 'the ten', respectively.
- 3. The preceding and following syllable of the variable: the preceding and following syllables were classified into light, heavy, superheavy and Pause. The first run of Rbrul returned the syllable environment significant and since the heavy syllable can be a closed or an open syllable I decided to investigate the behaviour of these syllables separately. Thus I added a column with 6 values: Pause, CV, CVV, CVC, CVVC and CVCC.

- 4. The variable position: this means whether the variable occurred in 1) the stem as in *hna:.ka* vs. *hi.na:.ka* 'there' or *bju:t* vs. *bi.ju:t* 'houses' or 2) the affix as in *xa:l.tak* vs. *xa:.la.tak* 'your aunt' or *nsaw.wi* vs. *ni.saw.wi* 'we do'
- Boundary: this means whether syncope or epenthesis occurred within the word or at word boundaries
- 6. Gender: a binary factor (male and female)
- 7. Age group: it consisted of four factors (old, middle-aged, adult and young).

For the resyllabification variable, I did not code for community (urban vs. Bedouin) because the traditional form for both communities is different in that the traditional feature for the Bedouins is CC whereas for the urban speakers is CV. The two communities are analysed separately.

6.8.2 The behaviour of the urban community

In this section, data from the urban speech will be analysed at two levels: i) resyllabification within the word, and ii) resyllabification within the word and across word boundaries, combined together.

6.8.2.1 Resyllabification within words

In this stage, I examined the use of the variants [CC] and [CV] within the word with respect to the linguistic and social factors explained in the coding. For Rbrul analyses, I experimented with various models⁸⁵ but the application value selected was always the incoming phonological change, syncope. As explained before, the preceding syllables were classified into: Pause, CV, CVV, CVC as there were no occurrences of superheavy syllables before resyllabification within the word, whereas for the environment of the following syllables I added CVVC and CVCC. The first Rbrul run only returned the environment of the

²⁵¹

⁸⁵ These are presented in appendix 1

preceding syllable and C₁ manner of articulation significant out of the linguistic factors. In every Rbrul run, even though the following environment was always returned insignificant, I grouped the factors of both the preceding and following environments in the same way. The third run of Rbrul showed similarities between the behaviour of 1) Pause and CV syllables and 2) CVV and CVC syllables in the preceding environment; therefore, I conflated the environment of the preceding syllables and coded them as: 1) Pause+CV and 2) CVC+CVV. In order to decide which of these models would explain the linguistic variation best, I compared the different models using the chi-squared test in Rbrul. The results of all these chisquared tests⁸⁶ showed P values that were > 0.05, which indicates that the model with the least degree of freedom is the better model to represent the variation found in the data. Table 6.6 shows the Rbrul results of the model with the degree of freedom. Application value is the syncopated variant.

⁸⁶ In the chi-squared tests if the P value is > 0.05 then the model with the least df is best to explain the variation, but if the P value is < 0.05 the model with the biggest df is best to explain the variation.

				$R^2 = 0.426$	
Age group (P<1.82e-27)					
Factor	Log-odds	Tokens	[CC] mean	Centered factor weight	
Young	1.441	114	0.614	0.809	
Adult	0.867	117	0.470	0.704	
Middle-aged	0.106	164	0.293	0.527	
Old	-2.415	149	0.034	0.082	
Preceding syllable (p	<3.56e-05)				
Pause+CV	0.53	415	0.364	0.629	
CVC+CVV	-0.53	129	0.209	0.371	
C ₁ manner of articula	ntion (p<0.00639	9)			
Sonorant	0.292	264	0.375	0.572	
Obstruent	-0.292	280	0.282	0.428	
Gender (P<0.00881)					
Male	0.278	238	0.408	0.569	
Female	-0.278	306	0.265	0.431	
df 7				Grand mean 0.327	

Table 6.6: Rbrul results of the correlation between the use of the syncopated form within words and the independent variables among the urban community speakers

The P values of the significant factors were returned by Rbrul in descending order as follows: age group (P<1.82e-27), preceding syllable (p<3.56e-05), C_1 manner of articulation (p<0.00639) and gender (P<0.00881).

Results showed that age is the most important factor accounting for variation; the oldest age group disfavour syncope with a factor weight of 0.082 whereas the next three consecutive age groups: middle-aged, adult and young, use syncope at a rate of 29%, 47% and 61% with a factor weight of 0.527, 0.704 and 0.809, respectively. After age, the type of the preceding syllable was shown significant; the use of the variant [CC] is favoured when it is preceded by a pause or CV syllables (FW 0.629) whereas [CC] is disfavoured when it is

preceded by CVC or CVV syllables (FW 0.371). Considering the C₁ manner of articulation, syncope is favoured when the first member of the consonant sequence $[C_1C_2]$ is a sonorant sound (FW 0.572); however, if C₁ in the variant $[C_1C_2]$ is an obstruent, syncope is disfavoured (FW 0.428). The gender difference is almost statistically significant with the male speakers in favour of syncope (FW 0.569) whilst the female speakers disfavour the innovative feature (FW 0.431). The overall mean of usage of syncope within the word is 32%, which suggests that the occurrence of non-final open syllables in the form of CV is still a prominent feature of UMA; however, syncope is progressive, the results indicate that this is change in progress. In order to see a more detailed picture of the behaviour of the various social groups, table shows 6.7 shows cross-tabulation of the use of syncope with gender and age.

Urban Community % [CC				
Age group	Gender			
	Female	Male	Total	Tokens
Old	3%	4%	3%	149
Middle-aged	29%	29%	29%	164
Adult	28%	68%	47%	117
Young	61%	62%	61%	114
Total	26%	41%	33%	
Tokens	306	238		
			Total number of tokens 544	

Table 6.7: Cross-tabulation of the use of the syncopated form within the word by the urban community speakers

It can be seen in table 6.7 that syncope is progressively increasing as we move from the oldest to the youngest age group. There is not a significant sex contrast among the different age groups except for the adult speakers. Both sexes of the middle-aged group have initiated the change towards the use of [CC] at a rate of 29%. However, with the next adult age group, it appears that women lag behind men by a generation. Moreover, it is also shown that the adult male speakers use the innovative form the most in their speech (68%), even more than the young males at a rate of 62%.

6.8.2.2 Resyllabification within the word and at word boundaries

In this section, I will show Rbrul results of the resyllabification variable within the word and at word boundaries combined together. I added 936 tokens at word boundaries to the 544 within the word tokens analysed before. This model in which the boundary was considered and coded as a factor group was returned by Rbrul, uninterpretable. Next, I ran another model using the linguistic and social constraints considered in this study but without including the constraint whether syncope or epenthesis happened within the word or at word boundaries as

a linguistic factor. My reason for this was based on a number of arguments. First, I decided to treat syncope and epenthesis as post-lexical rules that happen naturally in connected speech not only within words but also at word boundaries. Indeed, this agrees with the literature on syncope in Crimean Tatar as was discussed by Kavitskaya (2004). Second, my decision was based on the conclusions given by Abu-Mansour that "both word-level and phrasal syncope follow from the interaction of the same constraints" (2011:54). Third, by drawing an analogy with the coding of the variable (dʒ), whereby the preceding or following sound was found not only within the word but also across word boundaries, e.g. *baSde:n dʒi:na badri* 'then we arrived early', I decided to exclude the distinction between the word and phrase level. The results of the Rbrul analysis of the resyllabification variable (at both levels: within the word and at word boundary) are displayed in table 6.8. Syncope, the CC variant, is the application value.

				$R^2 = 0.582$		
Preceding syllable (p<2.64e-102)						
Factor	Log-odds	Tokens	[CC] mean	Centered factor weight		
CV	2.346	447	0.754	0.913		
CVV	1.102	134	0.358	0.751		
CVC	-0.609	295	0.210	0.352		
Superheavy	-3.051	205	0.024	0.045		
Pause	0.212	399	0.361	0.553		
Age group (p<7.84	e-53)					
Young	1.273	332	0.639	0.781		
Adult	0.628	319	0.498	0.652		
Middle-aged	-0.069	434	0.399	0.483		
Old	-1.832	395	0.132	0.138		
Underlying vowel	(p< 2.64e-07)					
High back	0.613	359	0.462	0.649		
High front	0.410	985	0.400	0.601		
Low front	-1.023	136	0.265	0.264		
Gender (p< 0.0066	3)					
Male	0.194	637	0.427	0.548		
Female	-0.194	843	0.384	0.452		
C ₁ manner of artic	ulation (p<0.025	54)				
Sonorant	0.159	643	0.417	0.54		
Obstruent	-0.159	837	0.392	0.46		
Position (p<0.0373)					
Affix	0.156	813	0.390	0.539		
Stem	-0.156	667	0.418	0.461		
df 13				Grand mean 0.403		

Table 6.8: Rbrul results of the correlation between the use of the syncopated form within the word and at word boundaries and the independent variables among the urban community speakers

Rbrul analysis for this model returned four linguistic factors and the two social factors significant; the P values of the significant factors are ranked in the following order: preceding syllable (p< 2.64e-102), Age group (p< 7.84e-53), Underlying vowel (p< 2.64e-07), Gender (p< 0.00663), C₁ manner of articulation (p< 0.0254) and Position (affix vs stem) (p< 0.0373).

With respect to the preceding syllable, the table shows that syncope is most likely to occur when it is preceded by CV syllables (FW 0.913). This is followed by CVV syllables (FW 0.751). However, the occurrence of [CC] sequences is disfavoured when preceded by CVC syllables (FW 0.352) and superheavy syllables (FW 0.045). The last favoured environment for syncope is after a pause (FW 0.553). These findings provide several linguistic indications.

First of all, since the preceding syllable was returned significant and not the following syllable, this indicates that urban Medini Arabic is similar to Meccan Arabic (Abu-Mansour 2011) for being a language that shows right edge effects. This means that the ALIGN-L constraint is less highly ranked than ALIGN-R constraint and so can be violated. In other words, the unsyllabified consonant after syncope can easily be resyllabified as the coda of the preceding syllable.

A second indication is that the sequence of two consonants occurs best after CV or CVV open syllables whilst syncope is blocked after closed syllables particularly CVVC and CVCC superheavy syllables. Resyllabification after CV or CVV syllables can occur at ease in connected speech as after syncope the unsyllabified consonant can resyllabify as the coda of the preceding syllable:

 With CV syllables, e.g. *jaS.ni.li.Sib.na.bad.ri?* > *jaS.nil.Sib.na.bad.ri?* 'we played early, didn't we?'. 2) With CVV syllables, e.g. fi:.t^si.ja:g.Sa.las.se:ħ > fi:t^s.ja:g Sa.las.se:ħ 'there are windows overlooking as-Sēh⁸⁷' or Sa.la.ma:.wi.s^sil.na > Sa.la.ma:w.s^sil.na 'when we arrive'

Finally, as syncope is favoured after a pause this implies that there is a tendency in urban Medini Arabic towards the acceptance of onset clusters. However, as mentioned previously, the COMPLEX ONSET constraint is one of the set of highly ranked constraints and thus cannot be violated. This occurrence of onset clusters in UMA can be paralleled with what is happening in other dialects such as Qassimi Arabic. The left member of the onset cluster is licensed remotely to the left and is assigned as an extra-syllabic semisyllable which is moraless (see section 6.7.2). According to OT and Moraic theory, the left member of the onset cluster is linked to a degenerate syllable that is linked to the prosodic word (PWd) and not to the main syllable node and is therefore moraless (Kiparsky 2003). As stated by Auger (2001: 263) "a PWd corresponds to a lexical word, its affixes, and any clitics attached to it". Taking into account all of these aspects, the following figure shows the treatment of the possible onset clusters that can occur in UMA:

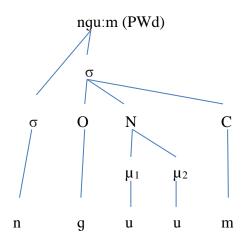


Figure 6.3: Treatment of onset clusters

⁸⁷ A neighbourhood in Medina

The outcome, after syncope, in the figure conforms to the Optimlaity and Moraic Theories in that the affix /n/ is considered an extra syllabic consonant that is not linked to the main syllable which remains bimoraic as trimoraic syllables are not permitted in modern Arabic dialects (Kiparsky 2003; Watson 2007). Furthermore, in UMA the creation of onset clusters can be due to syncope either in the stem or in the affix, as in *friħ.na* vs. *fi.riħ.na* 'we were happy' or *ni.ru:ħ* vs. *nru:ħ* 'we go', respectively. Moreover, it is worth noting that in UMA, onset clusters can occur even if they violate the Sonority Sequencing Principle⁸⁸, e.g. *ngu:m* 'we get up', *lSib.na* 'we played', *msik.na* 'we caught' and *lgi:.na* 'we found'. However, the number of onset clusters violating the sonority hierarchy was not enough to be included in Rbrul analysis as a lingusite factor.

After the factor of the preceding syllable, age was returned most significant (p<7.84e-53). The youngest age group use syncope the most (FW 0.781), followed by the adult age group (FW 0.652). On the other hand, the middle-aged group disfavour syncope (FW 0.483) and the oldest age group disfavour it the most (FW 0.138).

Concerning the underlying vowel, results showed that when syncope occurs in nonfinal open unstressed syllables, deletion of high vowels is more probable, either high back (FW 0.649) or high front (FW 0.601) while low front disfavours syncope (FW 0.264). This means that Urban Medini Arabic is a "differential" dialect where syncope significantly affects high short vowels more than the low vowel /a/ as opposed to "non-differential" where syncope involves deletion of all short vowels (Cantineau 1939 as cited in Abu-Mansour 2011:37). It is worth mentioning that although a low vowel was returned significant in disfavouring syncope, there were examples in which syncope involved a low vowel, with a usage of 26%, e.g. *fa.lo:.la.ha* > *fa.lo:l.ha* 'they removed (something) for her', *sa.fa.te:n* >

⁸⁸ Refer to 6.3

sa:f.te:n 'two hours' or *gi:.da.ni* > *gi:d.ni*. 'I have already done something (aspect marker)'. Such examples, mainly used by the younger speakers, can suggest that CVVC superheavy syllables are now occurring word medially as a result of syncope and are not only confined to word final position as was explained by Abu Mansour 1987; Al-Mohanna 1998; Jarrah 1993 &2013. Such occurrences, superheavy syllable word medially, were totally absent from the speech of the older speakers, thus confirming further that this is indeed a development in progress.

With regards to gender, it was returned significant but its course of significance is not clearly specified as the factor weight values range between 0.55 and 0.45. The male speakers favour syncope (FW 0.548) whilst the female speakers do not (FW 0.452).

With respect to the manner of articulation of C_1 in the variant $[C_1C_2]$, results showed that syncope is favoured when C_1 is a sonorant sound (FW 0.54). However, it is disfavoured when C_1 is an obstruent sound (FW 0.46). This result is logical as $[C_1C_2]$ can occur word initially as onset clusters which was also found to be statistically significant as a result of syncope after the prefixes *n*- or *m*- as in *ns^cal.li* 'we pray' or *mgat^c*, *t^caf* 'it is torn'. Syncope also occurs after a CVV syllable, particularly after the dative *-l* as in *fa:.lo:l.ha* 'they removed sth.from her', *ra:.ho:l.ha* 'they went to her' or after the sonorants */l*, r, m/ as in *le:l.tu* 'his evening', *bzu:r.tu* 'his kids' *jo:m.ha* 'that day'. Syncope and consonant reduction (de-gemination) occur to avoid CCC sequences after the suffixation of geminate verbs or nouns with consonant-initial pronouns. Older speakers maintain the use of CV syllables, e.g. *gul.tal.la.hum* whereas younger speakers apply two processes: syncope and consonant reduction, thus *gul.tal.hum* 'I told them'. More examples of this are: *naz.zal.la.na assiSir* > *naz.zal.na assiSir* 'he reduced the price for us' or with geminate nouns like *?um.ma.hum* > *?um.hum* 'their mother'. In most of these cases, where syncope $[C_1C_2]$ and a consonant reduction occurred, a C₁ sonorant sound was involved. The same feature is also employed by younger Medini speakers in the frequently used word *kul.la.na* > *kul.na* 'all of us'. In Bahrain speech community, Holes (2015: 72) reported that Manāma Arab speakers use /ə/ to block the occurrence of CCC sequences as in *kil.la.na* whereas Baḥārna speakers either insert a /ə/ or reduce the geminate cluster as in *kil.na* 'all of us'.

With reference to position, as seen in table 6.8, syncope is favoured (FW 0.539) if it occurs in the affix, while it is disfavoured (FW 0.461) in the stem. Again, this result is consistent as syncope usually targets non-final unstressed open syllables, which is the usual environment of affixes, and this happens without hindering the meaning intended to be conveyed. In contrast, syncope is disfavoured in the stem. However, it is worth mentioning that these factor weight values of Position (affix/stem), which range from 0.55 to 0.45, do not give a clear or specified direction of significance. The results of cross-tabulations between this factor group and the use of [CC] are shown in appendix 1, cross-tabulation 2. The overall mean of usage of the syncopated variant is 40%, which suggests that syncope is becoming an active process in UMA whenever the conditions for syncope are met.

The R^2 value of 0.582 is quite good and this could be due to the presence of a very powerful linguistic predictor, preceding syllable, alongside age.

With the aim of building a clearer picture of the sociolinguistic behaviour of the urban speakers, table 6.9 shows the cross-tabulation of gender and age.

Urban community				%[CC]	
Age group	Gender				
	Female	Male	Total	Tokens	
Old	12%	14%	13%	395	
Middle-aged	40%	40%	40%	434	
Adult	42%	62%	50%	319	
Young	64%	64%	64%	332	
Total	38%	43%	40%		
Tokens	843	637			
			Total number of tokens 1480		

Table 6.9: Cross-tabulation of the use of the syncopated form within the word and at word boundaries by the urban community speakers

It can be seen in table 6.9 that age is a very strong predictor in that the younger the speakers are, the more they will use syncope. Among the oldest age group, the oldest women and men rarely use syncope at a rate of 0.12% and 14%, respectively. However, there is a rather dramatic increase in the use of the new variant by the middle-aged group of both sexes (40%), who initiated this change. Only among the adult age group is there gender contrast with the male speakers using syncope at a rate of 62% compared to their female counterparts who use the new variant [CC] at a rate of 42%. Nevertheless, gender contrast disappears among the youngest age group with both sexes using syncope at 64%. The increase in the adoption of syncope throughout the successive age groups of both male and female speech indicates the possibility of a change in progress towards the innovative variant [CC].

The change towards syncope carries a number of social implications. First of all, the un-syncopated form is a salient feature of UMA and it has become an object of ridicule to the point that urban Medini speakers are known to *jumyut^cu* or *jumuddu fil kala:m* 'they drawl their speech'. A running joke has it: 'if you want to get a piece of information from an urban

Medini speaker then you need to set aside a whole day' (©!). Consequently, it seems reasonable to assume that urban Medini speakers have become especially conscious of this feature in their dialect, which can be seen as motivation to avoid it especially when interacting with outsiders. The change affecting syllable structure is most likely a type of 'change from above'.

Gender was shown to be almost significant with the male speakers being in favour of the new variant [CC] whereas female speakers disfavour it. Moreover, gender contrast was mostly significant among the adult age group. Within this group, the adult male speakers are the most advanced users of the innovative variant (62%), while their female counterparts use it at a rate of 42%. Speakers of the adult age group (30-44) are at the peak of their careers; they are the group who have most frequent contact with speakers of other dialects. It is true that men and women have the opportunity to work as active participants in the job market but men are freer to choose the type and palce of their work. When a woman works outside her house, she faces a number of restrictions. According to the local traditions, a woman's responsibility towards her family overrides any other responsibilities, including those pertaining to her career. For instance, it is more difficult for a woman to travel or take employment elsewhere in the country or abroad. Women's contact and social networks are therefore much more likely to be confined to the local community. In contrast, there are no such restrictions on men, and thus they are more mobile physically and socially. Consequently, men's social networks are likely to be more varied and more open; through such wide-ranging contacts men also have easier access to the target feature (through face-toface interaction). This finding, that the men of this age group (and overall) are in the lead of using an innovative feature that is borrowed from another dialect, is rather intriguing given Labov's Principle Ia (Labov 1990: 213).

In Change from above, women favor the incoming prestige form more than men. In the case at hand, we can cite three factors that, combined, explain this result. Firstly, the strong stereotype associated with the use of the Medini traditional un-syncopated form; to all intents and purposes, this is a localised and marked feature that would be expected to be levelled out in favour of the supra-local form (the syncopated form) especially in contact situations (cf. J. Milroy et al 1992). Secondly, there is pressure in the country as a whole towards linguistic koineisation, in the direction of the emerging regional standard; in this case, the pressure is to conform to the regional standard as represented by the dialect of the cosmopolitan city of Jeddah, which enjoys considerable prestige in the western region. Thirdly, the group of speakers who have had, and continue to have, more opportunity to access the target feature and integrate it in their ordinary speech are the male speakers. We can add the observation that the men of Medina may also be under strong pressure to abandon this feature because it is often described by outsiders as 'effeminate'. Similar findings in other Arabic-speaking communities have been recently reported. For example, Al-Hawamdeh (2016) found that in Sūf, a Jordanian Horāni dialect, the male speakers were found to be in the lead of change from above (from dark /l/ to clear /l/).

With reference to the middle-aged (45-59) and youngest (18-29) age groups in this study, the behaviour of both female and male speakers is identical at a rate of 40% for the former group and 64% for the latter group. These figures, particularly those of the youngest generation, denote that the application of syncope has become an active process in progress. Indeed, it is now favoured by the younger generation of both genders. An additional source of the syncopated variant in Medina is the traditional dialect of the various Bedouin groups, which do not have this feature. As I will show presently however, the Bedouin community seem to be diverging from the urban Medini speakers on this feature.

Syllable templates in UMA

According to the analysis of my data from urban Medini speech, the syllable templates in this dialect at the surface level are listed below:

- 1. CV syllables: in all positions
- 2. CVC syllables: in all positions
- CVV syllables: mainly in initial and medial position because in final position it becomes monomoraic as in *lbis.na*: 'we got dressesd' where the final CVV syllable becomes a CV syllable *na*
- 4. CVVC syllables: in final position and also medially though it was not statistically significant, e.g. *da:S.tu* 'at least'
- 5. CVCC syllables: occur on their own, e.g. bint 'a girl'
- 6. Syllables created because of ongoing syncope:
 - i. CCVC syllables, e.g. *mdar.ri.sa* 'a teacher', *mrat.ta.ba* 'she is organised'
 - i. CCVVC syllables, e.g. *tgu:m* 'she gets up' or *ns^cu:m* 'we fast'
 - ii. CCVCC syllables, e.g. *sbiħt* 'I swam', *lSibt* 'I played', *fhimt* 'I understood' or
 lmist 'I touched'.

6.8.3 The behaviour of the Bedouin community

In the same way as the urban data was dealt with, I experimented with different models for the Rbrul runs⁸⁹either within the word or at word boundaries. In the first model, age group, position, preceding syllable, C₂ manner of articulation and the following syllable environments were returned as the significant factors out of all the factors listed in the coding protocol. As was explained, the preceding and following syllable environments were classified as: Pause, light, heavy and superheavy syllables. Since the heavy syllables can be

²⁶⁶

⁸⁹ These are provided in appendix 2.

either closed or open syllables, I decided to analyse the behaviour of syllables separately. I reclassified them as they occurred in my data: 1) for the preceding environments: CVVC, CVCC, CVV, CV, CCVC, CVC and Pause, 2) for the following environments: CVCC, CVVC, CVC, CVV and CV. Based on the statistical results of the second model in which syllables were treated separately, I was motivated to regroup the preceding environment into CVV+CV as open syllables, CVC+CCVC as closed syllables, CVVC+CVCC as superheavy syllables and Pause. The environments of the following syllables remained the same. Likewise, concerning the C₂ manner of articulation statistical results led me to conflate approximants, nasals, and laterals in one group, i.e. sonorants whereas fricatives and stops remained intact as two distinct groups. As you can see in the third model in appendix 2, the behaviour of following CVC and CVV syllables is similar and so they could be regouped into CVC and CVV syllables represented in 479 tokens. In order to decide which of these models would explain the variation the best, the four models were compared using the chi-squared test in Rbrul. The chi-squared tests showed P values that were > 0.05; this means that the difference between the models is insignificant and model 4 was the one with the least degree of freedom and therefore was eventually selected. Rbrul results did not show a great difference statistically, whether the resyllabification variable happened within the word⁹⁰ or at word boundaries. Since both the preceding and following syllable environments were returned significant by Rbrul, I ran another model to see the effect of interaction⁹¹ between these two linguistic factor groups. Unfortunately, in some envrironments there were insufficient tokens to draw comparisons. This could be achieved with a larger pool of data in future research. The following Rbrul model shows the results of the resyllabification variable

 $^{^{90}}$ In this model, there were 956 tokens and results are provided in appendix 2

⁹¹ The model with interaction is shown in appendix 2

with respect to the Bedouin data within the word and at word boundaries; the application value is the incoming variant, epenthesis [CV].

				$R^2 = 0.576$		
Age group (P< 1.3e-56)						
Factor	Log-odds	Tokens	[CV] mean	Centered factor weight		
Old	-3.470	251	0.008	0.03		
Middle-aged	0.448	265	0.287	0.61		
Adult	1.664	343	0.525	0.841		
Young	1.358	322	0.484	0.795		
Position (P< 2.12e-09	9)					
Stem	0.472	543	0.424	0.616		
Affix	-0.472	638	0.288	0.384		
Preceding syllable (I	Preceding syllable (P< 3.16e-07)					
CVVC+CVCC	1.470	32	0.781	0.813		
CVV+CV	-0.165	415	0.407	0.459		
CVC+CCVC	-0.348	460	0.343	0.414		
Pause	-0.957	274	0.226	0.278		
Following syllable (F	P< 6.81e-06)					
CVCC	1.041	33	0.636	0.739		
CV	0.070	402	0.361	0.517		
CVC+CVV	-0.268	479	0.372	0.433		
CVVC	-0.843	267	0.262	0.301		
C ₂ manner of articulation (P< 0.00027)						
Fricative	0.320	526	0.382	0.579		
Sonorant	0.102	368	0.356	0.525		
Stop	-0.422	287	0.286	0.396		
df 13				Grand mean 0.351		

Table 6.10: Rbrul results of the correlation between the use of the epenthetic form within the word and at word boundaries and the independent variable among the Bedouin community speakers

The P values of the significant factors were returned by Rbrul in descending order as follows: age group (P<1.3e-56), position (P< 2.12e-09), preceding syllable (P< 3.16e-07), following syllable (P< 6.81e-06) and C₂manner of articulation (P< 0.00027).

Among the social variables, the age factor was the only factor which was returned significant by Rbrul. Old speakers strongly disfavour vowel epenthesis (FW 0.03) while the three younger groups: middle-aged, adult and young use vowel epenthesis at a rate of 28%, 52%, and 48%, with a factor weight of 0.61, 0.795 and 0.84, respectively. The effect of gender as a predictor was not returned significant. The overall mean of usage of vowel epenthesis is 35% which indicates that the [CVC] is progressive in the speech of Bedouin speakers.

With respect to the position as a factor group, epenthesis is favoured in the stem (FW 0.616) while it is disfavoured in the affix (FW 0.384). These results make sense as the stem always carries the core meaning and to make it clearer, epenthesis could be used as a facilitating factor for the sake of urban listeners to understand their dialect more easily. Syncope can be applied to affixes without causing a change in meaning. Indeed, these results can be viewed as the mirror image of what is happening in the urban data where syncope is favoured in the affix but disfavoured in the stem.

Regarding the environments of the preceding syllable, vowel epenthesis is favoured when preceded by CVVC and CVCC superheavy syllables (FW 0.813). Unfortunately, there are only 32 tokens in this category; 25 of these occurred at word boundaries with the variant [CV] at a rate of 78%, e.g. *law.ma.hu.maw.dzu:d.t^ci.was^c.s^cil.na* 'if he is not available, she will drive us' and *an.na:s.ti.fað^c.ð^cil* 'people prefer' or with stems as in *le:.la.tal.Si:d.t^ci.liS.na* 'we went out in the evening of Eid' and *kul.fajj.li.Sib.na* 'we played everything'. These findings indicate that in BMA onset clusters are disfavoured when preceded by superheavy syllables. It also implies that BMA is similar to UMA in that both varieties show right edge effect as opposed to left edge effect whereby syncope is facilitated when the unsyllabified consonant becomes the coda of the preceding syllable. In the case of superheavy syllables, it is reasonable to expect vowel epenthesis whereas syncope is blocked because of the unavailability of coda free positions. The remaining seven tokens with the [CC] variant, five occurred medially within the word, e.g. *ji.dzi:b.lna* 'he brings us' or *\langle ju:n.hum* 'their (m.) eyes' and the other two tokens occurred as onset clusters as in *tlabb.sa* 'she gets him dressed' or *tru:h* 'she goes'; it is worth nothing that in these examples, syncope affected the affixes. Although these findings are in agreement with the literature, if future reseach were to be carried out, it would be advisable to use a larger database to shed more light on this factor. In contrast, vowel epenthesis is disfavoured when preceded by the following environments:

- CVV and CV syllables (FW 0.459); these are open syllables and vowel epenthesis is not necessary, e.g. in *ka.la:.ma.hum* 'their speech' the low vowel /a/ in the third syllable is deleted and the unsyllabified /m/ is resyllabified as a coda of the preceding syllable and becomes *ka.la:.m.hum* since mora sharing of *m* with the long vowels is allowed in this dialect.
- 2. CVC and CCVC syllables (FW 0.414); although these are closed syllables, there is still room for an unsyllabified consonant resulting from syncope to resyllabify as the coda of the preceding syllable, e.g. as^cs^c.ya:r 'the young', minn.ha 'from her', *Sind.hum* 'they have'. Similarly, with CCVC syllables they always begin with /m/ and syncope creates geminate codas as in *mwaff.ra* 'she has provided.', *mwadzdz.ha*. 'a supervisor (in school)', and *mxaH.s^ca* 'I finished'. Syncope, either after CV and CVV open syllables and CVC and CCVC closed syllables, would create non-final superheavy syllables which are not considered marked syllable templates in BMA. In

fact, such occurrences of non-final superheavy syllables have been reported in Najdi and Qassimi Arabic (see section 6.7.2).

3. A pause (FW 0.278); onset clusters are allowed in the Najdi varieties such as the Najdi Arabic spoken in Riyadh and Qassimi Arabic; BMA, as a typical example of Najdi variety, is no exception. Onset clusters can occur either in the stem, e.g. *hna:k* 'there', *kba:r* 'they are big', *bju:t* 'houses'; or in the affix, e.g. *ns^cal.ti* 'we pray', *tSad.di* 'it passes', and *nfas.^cs^cil* 'we have dresses made'.The unsyllabified first member of the onset cluster is assigned as an extrametrical syllable, which is directly linked to the word and not to the syllable node in order to adhere to the rules of Optimality and Moraic theory (see section 6.8.2.2). In fact, the same phenomenon of vowel deletion in onset positions now occurs in UMA where vowel epenthesis is mainly maintained by the older conservative generation to avoid the occurrence of onset clusters.

Regarding the environment of 'following syllable', vowel epenthesis is favoured in two environments: when followed by CVCC syllables (FW 0.739) and CV syllables (FW 0.517). For example, *li.Sibt* 'I played', *li.bist* 'I got dressed'or *ri.ʒiSt* 'I returned' and *dʒi:.ra:.na.na* 'our neighbours', *xa:.la.ti* 'my aunt', *ji.gu:.la.ha* 'he is saying it' are now more frequently used particularly by the younger generation instead of *lSibt*, *lbist* or *rʒiSt* or *dʒi:ra:.na, xa:l.ti*, *ji.gu:l.ha*. Vowel epenthesis is slightly disfavoured when followed by CVC and CVV heavy syllables (FW 0.433), e.g. *San.na.hum* 'about them', *Sin.da.hum* 'they have', *hi.naa.ka* 'there', *fil.bi.da:.ja* 'at first' are in variation with *Sann.hum*, *Sind.hum*, *hnaa.ka*, and *filb.da:.ja*. Finally, vowel epenthesis is disfavoured when followed by CVVC syllables (FW 0.301), e.g. *nru:ħ* 'we go', *tku:n* 'she is', *ndʒi:b* 'we bring' or *sdʒu:n* 'prisons'. These findings are not surprising as non-final super heavy syllable structures are considered marked features and are thus being levelled out in the mixing of the urban and Bedouin Medini dialects. However, when followed by CVVC syllables vowel deletion creates onset clusters which can be found in both dialects and can be accounted for in terms of different phonological theories such as OT and Moraic theory (see section 6.8.2.2).

With respect to the second member of the sequence of consonants $[C_1C_2]$, vowel epenthesis is favoured if C_2 is a fricative (FW 0.579) or a sonorant (FW 0.525) while vowel insertion is disfavoured when C_2 is a stop (FW 0.396). These findings can be explained in terms of the Principle of Sonority Hierarchy (see section 6.3). In fact, if C_2 is a stop, there will be no violation of sonority and therefore epenthesis is not required to repair the violation. However, if C_2 in the variant $[C_1C_2]$ is either a sonorant or a fricative, there will be more possibilities for violation and in these cases epenthesis is used as a repairing strategy especially if $[C_1$ and $C_2]$ form a cluster. For example, *baSd ramað^ca:n* 'after Ramadan^{92,} would occur more frequently without epenthesis than *gabl ramað^ca:n* 'before Ramadan' as the cluster *Sd* conforms to the comprehensive sonority hierarchy by which fricatives are ranked more sonorous than stops, their obstruent counterparts (Parker 2008). In contrast, *bl* does not since *l* is more sonorous than *b*, triggering vowel epenthesis and becomes *gabil ramað^ca:n*.

With the aim of constructing a more detailed picture of the linguistic behaviour and its correlation with gender and age, a table showing cross-tabulation is presented below.

⁹² A month in the Hiğri 'lunar' calendar

Bedouin community				%[CV]
Age group	Gender			
	Female	Male	Total	Tokens
Old	0%	2%	0.8%	251
Middle-aged	25%	36%	29%	265
Adult	52%	53%	53%	343
Young	56%	41%	48%	322
Total	35%	35%	35%	
Tokens	599	582		
	Total number of tokens 1181			

Table 6.11: Cross tabulation of the use of the epenthetic form by the Bedouin community speakers

As can be seen from table 6.11, the general tendency is towards an increase in the use of vowel epenthesis. The old age group are the most conservative with the old women using the traditional variant [CC] consistently. Then, the adoption of vowel epenthesis is initiated by the middle-aged group with the male speakers using it at 36% and the female speakers at 25%. Among the adult age group, there is no gender contrast in the use of [CVC] as it is used at 52% and 53% by the female and male speakers, respectively. In contrast, among the youngest age group, women are ahead of their male counterparts in implementing the change towards vowel epenthesis. With regard to the female speech, the increase in the application of vowel epenthesis is happening progressively in that the younger the female speakers the more they will use vowel epenthesis. Concerning male speech, it is the adult age group (30-44) who use vowel epenthesis the most 52%, while the youngest male speakers (18-29) use it less, at 40%. If we compare the behaviour of the urban speakers to that of Bedouin speakers, we can observe that it is the adult male age groups of both communities who show a large increase towards the new variant: syncope for the urban community and vowel epenthesis for the Bedouin community. As was explained before, the speakers of this age group are the ones considered to hold well-established jobs and thus have wider contact with more diverse

communities. I was thrilled by the results because they are a mirror image of what is happening in the urban community. In fact, speakers of both communities are *apparently* accommodating to each other by levelling out the marked syllable templates in their respective dialects, and in doing so showing a divergent trajectory of change in the use of this feature. While the Bedouin group's behaviour must be interpreted as approximation to urban Medini, the urban Medini group's behaviour is most likely approximation to Jeddah speech; it so happens, so to speak, that on this occasion the traditional Bedouin feature, [CC], is identical to the form found in the koineised regional standard.

6.9 Conclusion

Looking at the trajectory of change in each group's dialect reveals a rather amusing picture: while the Bedouin group 'chase' the urban feature [CVC], the urban group shun their own form, [CVC], and instead adopt [CC] which is the koineised form and at the same time the Bedouin traditional form. As far as the Bedouin group is concerned, the urban group's dialect defines 'urban speech', which seems to be their target. In other words, for the Bedouin group progress implies converging to urban ways of social behaviour, including language. On the other hand, 'urbanity' is not a salient aspect of progress for the urban group – since they are secure in their position as 'urban' in speech and social traditions. The category that is above them socially is defined differently, possibly along the lines of 'cosmopolitan lifestyle', 'liberal mentality' and 'emancipation', which are associated with the lifestyle of Jeddah and *Jedda:wijji:n* 'Jeddah people'. The trajectory of change, as shown in the results, shows that the urban Medinis are converging to the speech of the group whom they admire. The difference in the behaviour of the two groups is due in the first place to the fact that the Bedouin and urban dialects have distinct roots. Were the change captured in my research in apparent time to progress further, we might see further divergence in the behaviour of Medini

groups leading to the creation of a common dialect or even a koine. In fact, speakers of both communities are accommodating to each other by the levelling out of the marked syllable templates of both varieties, and are adopting the supra-local syllable structures.

Chapter 7

Conclusion

This study has adopted quantitative analysis to assess linguistic variation and change in the use of two linguistic variables: (d3) and syllable structure by speakers of two distinct varieties: Bedouin and urban, both spoken in Medina. This investigation is based on the principle that contact between speakers of languages or dialects that are mutually intelligible can lead to koineisation whereby marked or stereotyped features are levelled out, potentially leading to the formation of a koiné. The sociolinguistic situation in Medina attracts a special interest because of the dialects involved in the mixing, and the ethnicities of the communities under study. The Bedouins are distinguished from the urban group as they epitomise the sharing of a sole identity, origin and culture whereas the urban group is an immigrant-based community originating from a range of geographical and cultural origins. Accordingly, the Bedouins and the variety they speak symbolise conservatism and retention of traditional trends while the urban community and their dialect represent change and innovation.

The results of the study are summarised as follows:

• With respect to the linguistic variable (d₃), the affricate variant [d₃] is found to be the traditional form, as suggested by the data obtained from the oldest and least mobile speakers. Nonetheless, a fricative [3] is also found, for the most part in the speech of the younger speakers. The results showed that there is change in progress towards the fricative variant. These findings are not surprising as this change can be accounted for linguistically and socially. It is now widely accepted that the palatalised reflexes of /d₃/ (affricate, fricative and glide) are historically more recent (innovative) than the velar realisation found in Southern Arabia (Yemen and Oman) and parts of Egypt (see Sibawayh 1988, Cantineau 1960, Woidich & Zack 2009, interalia). The change from

affrication to deaffrication has been reported in many languages of the world as a developmental process of lenition whereby an affricate sound loses its occlusion in the oral tract either partially and becomes a fricative or completely and becomes a glide /j/. Socially, it is possible that the variation in the use of $d\bar{z}\bar{n}m$ was triggered through face-to-face contact with speakers of the Jeddah dialect resulting in the diffusion of Jeddah Arabic features to nearby Higāzi locations such as Medina. The fricative [3] is a hallmark of the contemporary dialect of Jeddah, the largest and most populous city in al-Hiğāz. This change is led by the younger women in both communities: urban and Bedouin. Although gender differences were not returned significant in the urban data, cross-tabulation of gender and age showed that it is the youngest urban women who use the fricative variant the most. In the Bedouin group's speech, gender differences were found significant, with the youngest Bedouin female speakers leading the change. When considering 'community' as a social factor, urban speakers' usage of the incoming variant is more advanced than that of the Bedouins. Concerning the linguistic conditioning factors, lenition is favoured when the variable is preceded by a high front, a back and a low vowel and when followed by a coronoal. It is also favoured in weak positions such as in unstressed syllables and coda positions, whereas it is disfavoured in strong positions such as in stressed syllables and onset positions.

• With respect to the resyllabification variable, results revealed that there is change in progess in the direction of the levelling out of marked syllable structures through the use of two phonological processes, syncope and epenthesis. Syncope is the incoming variant in the urban dialect whereas epenthesis is the innovative form in the Bedouin variety. The course of change in both dialects is towards the adoption of unmarked forms. The leaders of this change in both communities are the adult male speakers.

Linguistically, syncope is favoured when targeting the high short vowels either in the affix or in onset clusters when preceded by open CV and CVV syllables particularly if the first member of the $[C_1C_2]$ sequence is a sonorant sound, whereas it is blocked after closed CVC and superheavy syllables. On the other hand, epenthesis is favoured in the stem and after superheavy syllables but disfavoured when preceded by open CV and CVV syllables, closed heavy CVC and CCVC syllables and Pause. When followed by light and CVCC syllables, epenthesis is favoured but disfavoured before heavy and CVVC syllables.

For both variables, the interpretations of the results solicit theoretical principles (particularly from phonological theory and diachronic linguistics), and analyses of socioeconomic and socio-political developments pertaining to the locality and the region.

Before the urbanisation and settlement of the Bedouin/tribal group in Medina, the speakers of the dialects being investigated in my study had very little opportunity of face-to-face interaction. It is reasonable to assume that lack of opportunity of interaction between the two groups meant that their dialects were clearly demarcated. This situation has changed considerably since settlement of the Bedouin group inside the city. Spread of compulsory schooling and new types of employment brought large sectors from the Bedouin and urban communities into regular and frequent contact. The results of my research clearly indicate that the traditional lines of demarcation between the Bedouin and urban dialects are attenuating, and that shared linguistic features are emerging. Indeed, while listening to the interviews as a native speaker of the urban variety, speech from the oldest Bedouin age group was not easy for me to understand whereas I had no problem in understanding the young Bedouin speakers. This is reflected in the result of my apparent-time data, which show convergence in the speech of the younger generations from both groups towards a norm of speech that is increasingly developing a number of shared linguistic features. The contact

between the urban and Bedouin varieties is a typical example of dialect mixing and levelling which has the potential to result in the emergence of a more homogenous local variety. (cf. Trudgill 2004).

On the basis of the empirical evidence presented in this thesis, which shows that the target features are identical to features found in the Jeddah dialect – more systematically expressed through the behaviour of the urban community - it is possible to conclude that the change found in Medina originates in linguistic accommodation by the urban Medini speakers to Jeddah norms. The urban sector of the Medini community has extensive contact with Jeddah; many of them have close family members in both cities and consider themselves members of both communities (Medina and Jeddah). In many ways, the urban group as a whole represent a 'middle class urbane' culture whose social networks are 'open' (L. Milroy 1980). In contrast, the Bedouin group is a much more localised group. The structure of their community (tribal) necessitates maintaining strong connections with the villages where other clans of the same tribe (Harb) reside. Given these differences in the social and physical mobility between the two groups, it is reasonable to suggest that innovations in Medina are introduced through the urban Medinis, and that the innovations disseminate to the rest of the community of Medina through accommodation to the urban speakers. The urban group function as 'linguistic transmitters', so to speak. If the proposal that the changes captured in this research were triggered by contact with speakers of the Jeddah dialect is valid, they can be classified as "exogenous change", viz. " ... the result of influence of other external varieties." (Trudgill 1999: 134). However, the medium, or route of access, is different for the two groups: in the case of the Bedouin group they access the innovative forms through contact with fellow Medinis.

There are two aspects of linguistic change that sociolinguistic investigations need to account for: (i) the impact of the change on the language system itself. In the case of (d₃), the

change to [3] is purely phonetic. In the case of resyllabification, the change is structural, affecting the syllable templates; if completed, this change will render some of the templates in the traditional urban dialect inadmissible, while introducing new structures that were formerly ungrammatical. In the Bedouin dialect, resyllabification is also structural change, which can lead to the disappearance of salient Bedouin features such as a string of three consonants (CCC), and the 'ghawa syndrome'. (ii) The social meanings of the linguistic change. By accommodating to features that are characteristic of the speech of a cosmopolitan city (Jeddah) the Medinis may be experiencing a desire to embrace social change. In comparison with Medina, Jeddah society is considerably more liberal; for Medinis, Jeddah people are a 'role model' in many ways. In Medina itself, it is the urban Medinis who assume the position of a 'role model' for the Bedouin group.

Finally, the developments in Medina can be seen as a prototype of developments that have already been recorded in other locations within the country, as well as developments that are likely to happen. The common characteristic among the changes captured in my research and those investigated in other studies in Saudi Arabia (e.g. Al-Essa 2009; Alqahtani 2014, Al-Ammar, forthcoming) is 'koineisation', whereby localised features are levelled out in favour of supra-local forms, and the end result seems to be the emergence and focusing of varieties that we may be able to describe as 'regional standards'. Moreover, native speakers seem to be aware of the existence of such varieties, hence the expression *al-lahdza al-be:* $\delta^s(d^s)a$ 'lit. the White Dialect' that is used commonly to refer to the 'umarked varieties'. The rise in social consciousness of the linguistic developments in various parts of the country suggests that natural standardisation of the vernaculars, possibly as a direct result of improved communication facilities, is at an advanced stage of development.

Recommendations for further research

This research is the first sociolinguistic study to be conducted in Medina. It would be vital in future research to investigate more features. For instance, my research shows that the following linguistic features are variable:

- The use of *wa:ħid* as an indefinite article in urban Medini
- Variation in the use of the definite article *al* in the Bedouin dialect
- Variation in the adverbial *lamma* 'when'
- Variation in the interdental sounds in the Bedouin dialect
- Conjugation of the 3^{rd} person imperfect forms (*ji~ja*)
- Loss of gender distinction in the plural 2nd & 3rd person endings, suffixes and pronouns
- Variation in vowel quality (u~i) e.g. *musma:r~misma:r* and (u~ a) e.g. *Sinduhum~ Sindahum* in the Bedouin dialect

In addition, it would be interesting to include children as informants, which would shed light on convergence at earlier stages.

Finally, it would be important to investigate the other clans of the Harb group in Medina, especially the Banū Sālim the majority of whom are known to have migrated to Medina from the west; this social group is referred to as the Hiğāzi Harbi Group (II-Hazmi 1975 and Al-Mozainy 1981). Other minor social groups which constitute the whole speech community of Medina, e.g. the Šīʻi community, the Šanāqṭa community named after the city of Šinqīţ 'Chinguetti' in Mauritania, and the non-Arab immigrants community can also widen the scope of research and hence the understanding of the structure of variation in this multi cultural speech community.

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Appendix 1: Rbrul Models of the urban data

Model 1

				R ² 0.503
Preceding syll	able (P< 2.64e-	28)		
Factor	Log-odds	Tokens	[CC] mean	Centered factor weight
Light	0.525	18	0.333	0.628
Pause	0.217	397	0.360	0.554
Heavy	-0.742	129	0.227	0.323
C ₁ manner of	articulation (P-	< 0.0488)		
Liquid	3.007	65	0.369	0.953
Nasal	2.663	196	0.383	0.935
Plosive	2.203	199	0.291	0.9
Fricative	2.012	81	0.259	0.882
Approximant	-9.885	3	0.000	< 0.001
Age group (P<	< 7.94e-27)			
Old	-2.397	149	0.034	0.083
Middle-aged	0.114	164	0.293	0.528
Adult	0.862	117	0.470	0.703
Young	1.421	114	0.614	0.805
Gender (P< 0.	.00959)			
Male	0.277	238	0.408	0.569
Female	-0.277	306	0.265	0.431
				Grand mean 0.327

				R ² 0.433
Preceding syl	lable (P < 0.00	018)		
Factor	Log-odds	Tokens	[CC] mean	Centered factor weight
CV	1.184	18	0.444	0.766
Pause	0.269	397	0.360	0.567
CVC	-0.582	41	0.317	0.359
CVV	-0.872	88	0.159	0.295
C ₁ manner of	articulation (l	P < 0.00555)		
Sonorant	0.299	264	0.375	0.574
Obstruent	-0.299	280	0.282	0.426
Age group (P	< 3.52e-27)			
Old	-2.429	149	0.034	0.081
Middle-aged	0.095	164	0.293	0.524
Adult	0.892	117	0.470	0.709
Young	1.442	114	0.614	0.809
Gender (P < 0).00993)			
Male	0.275	238	0.408	0.568
Female	-0.275	306	0.265	0.432
				Grand mean 0.327

Cross-tabulation 1:

Corss-tabulation between the use of the syncopated form within the word and at word boundaries and the individual categories (manner of articulation) of C_1

Urban Community		% [CC]
C ₁ manner of articulation		
	%[CC]	Tokens
Approximant	30%	10
Fricative	41%	241
Liquid	42%	117
Nasal	42%	516
Stop	39%	596
Total	40%	
		Total number of tokens 1480

In the table above, we can see that the effect of the manner of articulation of C_1 is nearly similar, with usage ranging from 39% to 42% except for the approximant (30%). Thus, based on the results I decided to conflate the sounds according to the sonority scale either into sonorants or obstruents. The following table shows the cross-tabulations between the use of [CC] and C_1 manner of articulation (sonorant vs. obstruent).

Urban Community		% [CC]
C ₁ manner of articulation		
	%[CC]	Tokens
Obstruent	39%	643
Sonorant	42%	837
Total	40%	
		Total number of tokens 1480

I also ran a one-level analysis between the dependent variable and the independent variables and the results provided justification for grouping liquids with nasals into sonorants as both environments favour [CC] while plosives and fricatives do not favour [CC] and were grouped as obstruents. For the approximants as there were only 10 tokens I decided to group them with sonorants considering sonority scale. The following tables shows the results.

C ₁ manner of articulation					
Factor	Log-odds	tokens	[CC] mean	Centered factor weight	
liquid	0.681	117	0.419	0.664	
nasal	0.120	516	0.419	0.53	
plosive	-0.088	596	0.386	0.478	
fricative	-0.274	241	0.411	0.432	
approximant	-0.439	10	0.300	0.392	

Results after the sounds have been grouped into: sonorants and obstruents are shown in table 6.8. in 6.8.2.2.

Cross-tabulation 2

Cross-tabulation between the use of [CC] and the independent variable position (affix/stem).

Urban Community		% [CC]
Position		
	%[CC]	Tokens
Affix	39%	813
Stem	42%	667
Total	40%	
		Total number of tokens 1480

Appendix 2: Rbrul models of the Bedouin data Model 1

				R ² 0.569	
Position (P< 4	.58e-09)				
Factor	Log-odds	Tokens	[CV] mean	Centered factor weight	
Stem	0.471	543	0.424	0.616	
Affix	-0.471	638	0.288	0.384	
Preceding syllable (P< 9.54e-09)					
Superheavy	1.657	42	0.833	0.84	
Light	-0.260	244	0.414	0.435	
Heavy	-0.423	621	0.348	0.396	
Zero	-0.975	274	0.226	0.274	
C ₂ manner of	articulation (l	P< 0.00255)			
Fricative	0.253	526	0.382	0.563	
Approximant	0.246	50	0.360	0.561	
Nasal	0.061	165	0.358	0.515	
Lateral	-0.095	153	0.353	0.476	
Stop	-0.466	287	0.286	0.386	
Following syll	able (P< 0.003	302)			
Light	0.360	402	0.361	0.589	
Heavy	0.006	480	0.371	0.502	
Superheavy	-0.366	299	0.304	0.409	
Age Group (P	< 1.42e-55)				
Old	-3.447	251	0.008	0.031	
Middle-aged	0.472	265	0.287	0.616	
Adult	1.643	343	0.525	0.838	
Young	1.331	322	0.484	0.791	
df 14				Grand mean 0.351	

					R ² 0.579	9
Position (P< 5	5.91e-09)					
Factor	Log-odds	s Tokens	5	[CV] mean	Centered factor weight	
Stem	0.488	543		0.424	0.62	
Affix	-0.488	638		0.288	0.38	
Preceding syl	lable (P< 4.8	87e-06)				
CVVC 1.761		24	0.792		0.853	
CVCC	0.570	8		0.750	0.639	
CVV	-0.112	172		0.395	0.472	
CV	-0.238	243		0.416	0.441	
CVC	-0.352	415		0.349	0.413	
CCVC	-0.643	45		0.289	0.345	
Zero	-0.986	274		0.226	0.272	
Following syl	lable (P< 0.0	0302)				
CVCC 1.101		33	0.636		0.75	
CV 0.149		402	0.361		0.537	
CVC	-0.189	340		0.362	0.453	
CVV	-0.258	139		0.396	0.436	
CVVC	-0.803	267		0.262	0.309	
C ₂ manner of	articulation	(P<0.00145)				
Approximant	0.343	50		0.360	0.585	
Fricative0.237		526	0.382		0.559	
Nasal -0.02	2	165	0.358		0.494	
Lateral	-0.042	153		0.353	0.49	
Stop	-0.516	287		0.286	0.374	
Age Group (P	P< 1.23e-56)					
Old	-3.486	251		0.008	0.03	
Middle-aged	0.447	265		0.287	0.61	
Adult	1.675	343		0.525	0.842	
Young	1.364	322		0.484	0.796	
df 19					Grand mean 0.35	1

				R ² 0.577	
Position (P< 5	.91e-09)				
Factor	Log-odds	Tokens	[CV] mean	Centered factor weight	
Stem	0.476	543	0.424	0.617	
Affix	-0.476	638	0.288	0.383	
Preceding syllable (P< 3.61e-07)					
CVVC+CVCC	1.466	32	0.781	0.812	
CVV+CV	-0.166	415	0.407	0.459	
CVC+CCVC	-0.346	460	0.343	0.414	
Zero	-0.954	274	0.226	0.278	
Following syll	able (P< 2.22e	-05)			
CVCC	1.101	33	0.636	0.75	
CV	0.149	402	0.361	0.537	
CVC	-0.189	340	0.362	0.453	
CVV	-0.258	139	0.396	0.436	
CVVC	-0.803	267	0.262	0.309	
C ₂ manner of a	articulation (P	< 0.00027)			
Fricative	0.319	526	0.382	0.579	
Sonorant	0.104	368	0.356	0.526	
Stop	-0.423	287	0.286	0.396	
Age Group (P	< 1.26e-56)				
Old	-3.472	251	0.008	0.03	
Middle-aged	0.449	265	0.287	0.61	
Adult	1.665	343	0.525	0.841	
Young	1.358	322	0.484	0.795	
df 14				Grand mean 0.351	

				R ² 0.576
Position (P< 5	.91e-09)			
Factor	Log-odds	Tokens	[CV] mean	Centered factor weight
Stem	0.472	543	0.424	0.616
Affix	-0.472	638	0.288	0.384
Preceding syll	able (P< 3.61e	-07)		
CVVC+CVCC	2 1.470	32	0.781	0.813
CVV+CV	-0.165	415	0.407	0.459
CVC+CCVC	-0.348	460	0.343	0.414
Zero	-0.957	274	0.226	0.278
Following syll	able (P< 6.81e	-06)		
CVCC	1.041	33	0.636	0.739
CV	0.070	402	0.361	0.517
CVC+CVV	-0.268	479	0.372	0.433
CVVC	-0.843	267	0.262	0.301
C ₂ manner of a	articulation (P	< 0.00027)		
Fricative	0.320	526	0.382	0.579
Sonorant	0.102	368	0.356	0.525
Stop	-0.422	287	0.286	0.396
Age Group (P	< 1.3e-56)			
Old	-3.470	251	0.008	0.03
Middle-aged	0.448	265	0.287	0.61
Adult	1.664	343	0.525	0.841
Young	1.358	322	0.484	0.795
df 13				Grand mean 0.351

				R ² 0.945
Position (P< 3.	47e-08)			
Factor	Log-odds	Tokens	[CV] mean	Centered factor weight
Stem	0.492	384	0.398	0.62
Affix	-0.492	571	0.291	0.38
C ₂ manner of a	rticulation (P	< 0.000101)		
Fricative	0.357	432	0.359	0.588
Sonorant	0.172	294	0.354	0.543
Stop	-0.528	229	0.262	0.371
Following sylla	ble (P< 0.000	573)		
CVCC+CV	0.464	413	0.375	0.614
CVC+CVV	0.057	358	0.335	0.514
CVVC	-0.520	184	0.239	0.373
Preceding sylla	able (P< 0.002	93)		
CVV+CV	0.597	330	0.400	0.645
CVC+CVV	0.454	347	0.360	0.612
Zero	-0.179	272	0.224	0.455
CVVC+CVCC	-0.871	6	0.167	0.295
Age Group (P<	< 1.3e-56)			
Old	-13.651	217	0.000	< 0.001
Middle-aged	3.735	207	0.251	0.977
Adult	5.045	263	0.510	0.994
Young	4.871	268	0.496	0.992
df 12				Grand mean 0.334

Model 5: Rbrul runs of the resyllabification variable within the word of Bedouin speech

					\mathbf{R}^2 0.588
Preceding syllab	ole (P< 9.93e-	08)			
Factor	Log-odds	Tol	kens	[CV] mean	Centered factor weight
CVV+CV	0.597	3	30	0.400	0.645
CVC+CVV	0.454	3	47	0.360	0.612
Zero	-0.179	2	72	0.224	0.455
CVVC+CVCC	-0.871	6		0.167	0.295
Position (P< 4.7	e-07)				
Stem	0.492	3	84	0.398	0.62
Affix	-0.492	5	71	0.291	0.38
Following syllab	ole (P< 1.79e-	05)			
CVCC+CV	0.464	4	13	0.375	0.614
CVC+CVV	0.057	3	58	0.335	0.514
CVVC	-0.520	1	84	0.239	0.373
C ₂ manner of art	ticulation (P<	< 0.000196)			
Fricative	0.308	5	26	0.382	0.576
Sonorant	0.108	3	68	0.356	0.527
Stop	-0.416	2	87	0.286	0.397
Preceding syllab	ole:following	syllable (P·	< 0.028)		
CVVC+CVCC:C	CVVC	1.440	4	0.750	0.808
Zero:CVCC+CV		1.420	37	0.514	0.805
CVV+CV:CVC+	-CVV	1.049	147	0.449	0.741
CVC+CCVC:CV	VC	0.578	133	0.308	0.641
CVV+CV:CVCC	C+CV	0.325	228	0.377	0.581
CVVC+CVCC:C	CVC+CVV	0.136	25	0.840	0.534
CVC+CCVC:CV	VCC+CV	-0.170	167	0.359	0.458
CVC+CCVC:CV	C+CVV	-0.408	160	0.356	0.399
Zero:CVVC		-0.643	90	0.100	0.345
Zero:CVC+CVV		-0.777	147	0.231	0.315
CVV+CV:CVVC	2	-1.375	40	0.425	0.202
CVVC+CVCC:C	CVCC+CV	-1.576	3	0.333	0.171

Model 6: Rbrul runs of the resyllabification variable within the word and at word boundaries showing the interaction between the preceding and following syllable environments of the best step-up model because in the step-down model the effect of the preceding and following syllables was not tested.

Age Group (P< 6.78e-58)				
Old	-3.502	251	0.008	0.029
Middle-aged	0.443	265	0.287	0.609
Adult	1.684	343	0.525	0.843
Young	1.375	322	0.484	0.798
df 18				Grand mean 0.351

Appendix 3: Samples of speech

Speaker 1: old, female, urban

1.?inn Sindik bizra bizrate:n t^suħut^st^si:ha fil Sarabijja witru:ħi.

2. tiru:ħi maħil maːtibɣi ʕala haːdal ħaːl ʕiʃna laː ʕindana xaddaːma laː ʕindana ʔaħad laː ʕindana ſajj ʔabadan.

3. kullu t^st^sas^sbi:n Sal jadd kawi bilfaħam.

4. basde:n sa:d kibirt wi kibrul bizu:ra ?asta?dʒarna sma:rat al-?awga:f fi sma:rat al-?awga:f fi ba:b alku:ma.

5. jaːħabiːbati haːdi baːb al-kuːma guddaːmaha as-siħeːmi daħħiːn raːħ as-siħeːmi guddaːmana as-saːħa.

6. la?a daħħiːn xalaːs^c haddoːha kullaha saːrat ʕamaːjir as-saːħa wassiħeːmi baːb al-madʒiːdi haːda kullu kaːn min dʒamb al-ħaram haːdil ʕamaːjir ʔilli raːħat kullaha haːdi at-taːdʒuːrijja al-maħmuːdijja.

7. maːtiʕrifuːha ʔintu haːda ʕindi guba kaːn kullu haːda seːl ʔaftakir wana sˁaɣiːra kunna nruːħ nilʕab fiː.

8. As-se:l jidzi:ki min fo:g wijunzul jaħabi:bati ?ale:n jiws^sal as-se:ħ wmasse:ħ ha:da kllu ka:n.

9. ka:n ħo:ʃ mans^su:r ka:n hina fi?a:xir guba fi: t^sijaag Sala sse:ħ ha:da kullu ka:n madʒra se:l.

10. *la: dza: fil le:l ba*sd al-sifa ha:da ba:b af-fa:mi jins^sak ba:b al-sambarijja jins^sak.

11. s^cayi:ra jaSni fabba lissa:Si ka:nat al-Madina s^cayi:ra

12. la: dza:l Sifa xala:s^s tiwalliSil lamba al-yunaja Sindaha Pitri:k al-fugara Sindahum lamba wfa:nu:s al-Pitri:k h:ada timalli: ya:z wlu: fuSla gawi.

Translation:

1. If you have one or two kids, you put them in the carriage and take them with you wherever you want to go.

2. We used to live this way. We did not have servants or helpers; we did not have anyone or anything at all.

3. We washed the dirty clothes by hand and did the ironing using an iron filled with hot charcoals.

4. Then when I was older and the children had grown up, we rented a flat from an endowment trust in the neighbourhood of Ba:b al-Ku:ma.

5. My dear, in front of this place is as-Siħe:mi.

6. Now as-Sihe:mi has been demolished. In front of us is as-Sa:ħa. Now, all of these areas have been pulled down and have become blocks of flats. As-Sa:ħa, as-Siħe:mi and Ba:b al-Madʒi:di were near the Prophet's Mosque. All of these buildings have been pulled down. at-Ta:dʒu:rijja, al-Maħmu:dijja.

7. You do not know these places. Near the area of guba there was a concrete drainage system and when I was young I used to go and play there.

8. This drainage system flows from high and it goes down, my dear, until it reaches as-Se:ħ.

9. There was a walled area called ħo:∫ mans^su:r which was located at the end of guba. There are windows overlooking as-Se:ħ. All of these places were situated along the drainage system.

10. When it is night after *Sifa* 'the last evening prayer', the gates of Ba:b af-fa:mi and Ba:b al-Sambarijja are locked.

11. I was very young in those days and Medina was very small.

12. When it was dark, you light the candle. The rich had gas mantle lanterns while the poor had oil and paraffin lamps. You fill these lanterns with gas and their flame becomes strong.

Speaker 2: Middle-aged, male, urban

1.kunt ?ana badrus fi sanawijjat t^ce:ba wiħna kunna sa:kni:n fi guba fa ka:n miſwa:r min guba: **liɣa:jat** al-Sambarijja.

2. ja§ni kunt **?aʒi** mafi bass firroːħa ja§ni **nifuːf** min hadoːli ttakaːsi ?ajji ?aħad **jiwas^ssⁱlna** bass **wfirradʒ§a** §aːd jaː ?inni **rʒi§t** mafi jaː ?innu fuft taksi fuft ?aħad §indu sajjaːra ?at[§]la§ ma§aː **jiwas[§]s^silni** §alal beːt **li?annu** kaːn mifwaːr.

3. Baːba **ʒabli** sajjaːra min wana taːnja sanawi **ʒabli** sajjaːra ʔana kunt ʔatʕallam fiːha minal mutˤawasʿsʿitʿ kunt ʔasuːg sajjaːrat Baːba wjaːma ʔaxabbitʿlu hijja jamiːn ſumaːl.

4. **jizi** ?e:f ha:da kunt ?agullu ?aɣassillak assajja:ra wana ?aːxuddlu hijja bass sirt ?atʕallam ?atʕallamt ʕale:ha jaʕni maː **ʒa:t** ?uːla sanawi taːnja sanawi ?illa ʕindi sajja:ra xalaːsˁ ?aſtaraːli sajjaːra bass **wsirt** ?aruːħ **waʒi** bissajjaːra whaːda **liɣaːjat** maː xallasˁna ssanawijja **wruħnal dʒaːmʕa**.

5. fi **ʒidda** saːfarna ?ajjaːmahal **dʒaːmʕa** fa ʕaːd fil bidaːja ʕaːd fil **dʒaːmʕa hinaːka fʒidda** ʕaːd ?ana kaːnat **ʒidda** binnisba lijja ſajj balad ɣariːba ?ana maʕrif **ʒidda** katiːr kunna **nru:haha** kida tamʃija **wnirʒaʕ.**

6. falamma ruht **3idda hna:ka** daxalt Sala **3a:mSat** al-Malik SabdalSazi:z Pana mani Sa:rif **ald3a:mSa** hatta dira:sat **al-d3a:mSa** tixtalif jaSni ka:nat niz^sa:mahum huwwa niz^sa:m sa:Sa:t ka:n tawwahum mit^sabbigi:n as-saSa:t Patlayat **hika:jat** as-sini:n wsa:rat as-saSa:t min jo:m maa Pana **3i:t** ka:nat tawwaha malyijja.

7. *Sa:d sadzdzili* sa:*Sa:t wha:da ?awwal fajj humma jsadzdzilu:lan* al-mawa:d wigulu:lana fa?ana daxalt kunt da:xil fil ?ida:ra wal?iqt^sis^sa:d^s ?ajja:maha wka:nat fi: mawa:d ?izba:rijja zajj al-muħa:saba wkunt taSba:n d^saSi:f fi:ha fa ma: gidirt ?astamir fil ?ida:ra wal?iqt^sis^sa:d^s ħawwalt li?iSla:m. 8. **baʕad** matxarraʒt mnal **dʒaːmʕa biʔarbaʕa** sniːn **ʔatzawwaʒna** liʔannu **ʒalasna** ʕabaːl waːħid maː kawwan nafsu **shwajja** jaʕni saːr ʕumri tagriːban tisʕaw ʕiſriːn sana tzawwaʒt jaʕni giːdi ha lammeːt riːſi zajj maj guːlu.

9. ?illi fil Madiːna majħubb **juxruʒ** minnaha li?annu ?ana ʕammart wxallasˁt al-ʕimaːra ħaggati.

10. wha:da wbass gult xalli:ni ?e:f jaSni tiSrifi lamma tsa:fri barra jizi:di ad-dxl **fiwajja** faka:nat Salajja dju:n **fiwajja** fa lamma ruħt lubna:n a-l?arbaSa sini:n ?illi ruħtaha fi lubna:n jaSni al-gard^ç ma: faSart fi: **riʒiSt** ma:rʒiSt ?illa gi:du xala:s^ç al-gard^ç mintahi.

11. lamma ruht ka:nat al-balad kullaha dama:r ka:nat midammara wka:nat **al-dzisu:r mikassara** wkunt ?abya **?arza\$** ga:lo:li t^{\$}abb **?azlis** sitta ʃhu:r ba\$ad sitta ʃhu:r **nifu:f niha:wil** ?innak ?e:ʃ **tirza\$** ja\$ni.

12. bass basd sitta ?ashur bada?at al-balad jasni swajja tala:ta riħla:t tiʒi:na fil ?usbu:s.

13. Pal-balad ka:nat **tixawwif** fu:fi hijja lubna:n jaSni Pana Pilli **simiStu** min al-Pasa:s ka:nat **tigullik** lubna:n jaSni Ba:ri:s al-Sarab.

14. ja§ni law ?inti tibyi **3aw** ba:rid ?inti fi ?a§azz as^s-s^se:f tibyi **3aw** ba:rid ?at^sla§i fo:g fil **d5abal bura:d bura:d** kannink fi fita.

15. ?as-sawa:ħil **tiʒi:ki** ħaːra ſwajja mizat al-balad haːdi **tilgi** fiːha **al-dʒaw** jasni fissse:f tigdari fi nafs al-joːm tigdari tſatti wi tigdari t^ss^sajjifi fi nafs al-joːm.

Translation:

1. I studied at the high school of $t^c e: ba$ and we used to live in *guba* (a neighbourhood in Medina). It was a long journey from *guba* to my school in *al-Sambarijja*.

2. I had to walk to school in the morning but on the way back home I would try to find a taxi or anyone who could give me a left, otherwise I had to walk home.

3. My Dad, bought me a car when I was in the second year of college; I learnt to drive in my Dad's car and I damaged it many times, sometimes on the left and sometimes on the right!

4. When he came and saw the damage, he always asked "what's happened?" I used to tell him that I am going to wash the car and in this way, I was able to take it and learnt to drive on his car and when I was in the first or 2nd year of college, my Dad bought me a car and I went by car wherever I wanted to go until I finished college and went to university.

5. Then I went to university in Jeddah and Jeddah was strange and unknown to me I did not know Jeddah very well because previously we only went to Jeddah for a few days for a change and then we would return to Medina.

6. When I went to Jeddah, I studied at the University of King Abdul Aziz where they had just implemented the credit system of hours When I arrived the credit system of years had just been cancelled and was replaced by the hours.

7. So you should register the modules in hours by yourself. At first, they do it for you. In the first year, I studied at the Department of Administration and Economics and there were compulsory modules such as accounting and I was not good in such courses and could not continue in this Department and had to change and studied at the Department of Media.

8. After I graduated from university, I waited four years until I got married so I could make some money. I was about 29 when I got married; by this time, I had "gathered my feathers" which means to get some money behind me, as they say.

9. The residents of Medina never want to leave so I built my own house there.

10. As I had debts after the building, I went to work in Lebanon for four years so that my salary was much higher and when I returned to Medina, my debts had been cleared so I had no pressure.

11. When I was in Lebanon, the whole country had been destroyed; the bridges had been destroyed so I wanted to go back to Medina. They told me to stay just for six months and then they would try to let me return.

12. But after six months the country had improved and there were three flights a week (from Saudi Arabia)

13. The situation in Lebanon was frightening. Mind you, I'd heard that Lebanon was considered the Paris of Arabia.

14. If you want cooler weather in summer you go up to the mountains where it is cold as in winter.

15. Along the coast it's hot. What makes this country special is that in summer you can experience winter and summer on the same day.

Speaker 3: Adult, female, urban

1.mi:n ?illi ju:gaf Sala t^st^sabx Ba:ba Sumar lamman jiwgaf **binafsu** jaSni jit^slaS marra maz^sbu:t^s wijiSt^su Ma:ma Marjam al-laħam **tibazziru** la:kin mi:n ?illi ju:gaf Salal ħufra rʒa:l rʒa:l jugaf Sale:.

2. t^sabSan ?ajja:m af-fita tla:gi jit^salliSu ?addural ħabafi ?abu farwa Sa:rfa **adz-dzuzar** aljama:ni daħħi:n marra ħarr **tla:gi:hum** kullu **zuwwa**.

3. ti\$rifi s^ss^suya:r ħaba:jbi juxruʒu barra ſwajja t^sab\$an **siba:ħa** jisbaħu ?asa:san Bakur min jo:m ma: t^sil\$ul ?istira:ħa \$abba fant^{\$}at^{\$}u wihna:k.

4. ?iza nagas^c sale: tinzil al-ħawa:jiʒ al-wis^cxa Ma:ma wma:rja las jo:m tinzil masa:ja jo:m
 tiba:t ?ams ba:tat fiwajja ?abya:ha titsawwad kama:n.

5. fu:fi fi: ?ummaha:t majħubbu jaʕni min **dʒid** ?ana ga:balt aſ-ſaxs^cijja:t ha:di xus^cu:s^can jaʕni ʕind ?ahil **zo:dʒaha** jaʕni t^ca:laman mabs^cu:t^ci:n juħubbu:hum ʕirifti xala:s^c xalli:hum.

6. ?ana gabil kama:n Ma:rja ma: tizi wka:n Bakur ?as^cyar ka:n al-be:t hina zajj al-ote:l.

7. huwwa ?illi Sallam Maːrja ?i/bik Maːrja maː tiSrif Baːba jiftaħlaha fil aːjbaːd jiwarriːlaha s^curat^cu siːdu Mħammad **tiʒlis tibuːsu**.

8. *tizi:b t^sa:wla zi:bi minilli fil dzalsa zajj ha:di zibi:ha masle:f ha:di t^sa:wla:t az-zalsa t^sabb nihawwil af-fa:hi niska:fa.*

9. ba§deːn lamman dʒibna Baːba fil beːt ʒibna Bakur ʕaʃaːn jiſuːf Baːba Baːba kaːn ʔindu Bakur ħaːʒa taːnja ħatta ʔaxwaːti **jiʒlis** jifakkirhum kunna daːjman leːltal ʕiːd nitˁlaʕ joːm maːj **ʒiːbul** ʕiːd **niruːħ** lisitti maʕa Maːma jaʕni **niʕajjid** ʕaleːha.

10. ba^cde:n **jirʒa**^c linafs at^c-t^cifil nafsu ha:di **ʒu:d tila:gi:ha** masalan ma^ca ?axwa:taha masalan ?axwa:taha kullahum ra:ħul be:t hijja ga:sda ma^ca si:daha wsittaha.

Transaltion:

1. It is my father-in-law who supervises the cooking, when he does this the food turns out really tasty. They give my mother-in-law the meat to marinade in spices but it is always the men who stands by the hole in the ground to manage the cooking.

2. Of course, during the winter days they bring corn on the cob, chestnuts, sweet potatoes. Now it's very hot, you'll find everyone indoors

3. But as you know the loving children go outside for a while to have a swim. Basically, Bakur, my son, as soon as my in-laws went to stay in their house in the country, he packed his suitcase and stayed with them.

4. When he is short of clean clothes we exchange the dirty ones for clean. Ma:rja, my daughter, one day she comes home with me or other days she sleeps there. Yesterday she slept there. I just want her to get used to staying there on her own.

5. Mind you, there are mums who do not like this. Actually, I've met people like this especially when kids stay with the in-laws. Do you know? I don't mind as long as they're enjoying themselves and their grandparents love them. Let them stay there.

6. Do you know before Ma:rja was born and Bakur was younger my house was like a hotel.

7. You know Ma:rja never knew my father and Bakur would open the IPad and showed her pictures of her grandpa, Mohammed, and she would kiss the photo.

8. Ok, she (the helper) can bring a small table (to her helper) "Bring a table from the living room, it's ok". Ok we can make nescafe instead of tea.

9. When we brought my father's body home from hospital, we brought Bakur to see my father because Bakur was very special to his grandpa. He even reminds my sisters of their

father. Usually on the Eve of Eid we would go to visit my grandmother with my mum to wish her happiness.

10. (Referring to staying at the country house) It depends on the kids themselves, for example, Jude would stay with her sisters at their grandparents, but when her sisters go back home, she prefers to stay with her grandparents.

Speaker 4: Young, male, urban

1.kunna ba:jti:n kullana maSa baSad^s minnahum miħammad jaSni t^SabSan kullana kunna ma: nibya **nru:ħ** li?annu ssa:Sa sitta mi:n ħa jis^sħa ssa:Sa sitta fa marra badri

2. fa ?illa maː s^siħju **tne:n** wgaSdiːn jaSni **js^saħħuːna** wzajj kida bilguwwa wkaːn ?iħna mawSidna maSa **rriʒʒa:l** ?az^sun xamsa wnus^s wiħna tagriːban **wis^silna** sabSa

3. bass ruhna t^sabSan bit^slu:S arru:ħ finniha:ja xala:s^s kullna wa:fagna wruhna wla: ma:ndimna jaSni mbas^sat^sna fi:ha marra **t^sliSna** tagri:ban min sabSa wnus^s jaSni kunna kullana fil be:t Sala **t^snaSf** wfajj

4. haːdil **?iʒaːza** ruħt fiːha **ʒidda** wgaʕatt maʕa sˁsˁħaːbi ʕaʃara jjaːm **wirʒiʕt** fil bidaːja kunt fi ħkaː**ʔjt aldʒamʕaːt** wlissa mani ʕaːrif ʔeːʃ ʔabɣa tˁtˁaxasˁsˁusˁ wmaː kunt ʕaːrif ʔaruːħ ʔamriːka maʕa maːma **ʔaʒlis** hina ʔatˁlaʕ ʕind maħammad maː kunt ʕaːrif wala ʔajj ʃajj fa ʔaxatt wagt kida lwaħdi wmaː sawweːt ʔajj ħaːʒa fiːlu kull illigdrit ʔasawwi ʔinni mbasˁsˁitˁ wbass finnihaːja **tˁliʕt** biqaraːr

5. Safa:n hina ?ahli ?awwal fajj ta:ni fajj at^s-t^saxas^ss^sus^s ha:da jaSni fa:if ?innu hina **kwajjis** wye:r kida ?abu:ja fi: gism at-tarbijja fa haj sa:Sidni whaku:n gari:b minnu wbass

6. Piza fil balad hina ma: ħatifrig Pajj **3a:m§a** fa fakkart fi:ha **f3idda** wiza ma: **\$a3abni** Pagdar Paħawwil \$a:di

7. framad^sa:n ka:n no:mi **mxarbat^st**^s zajj kull af-fasb kullaha ka:nat jasni **xarza:t** wzajj kida **wzalsa** fil be:t masal ?asssha:b wbass sa:jdi

8. ?ahil mħammad ?illi fil madi:na wallali fʒidda waħda marra wmaka:n fi: ?aħad bass kida fil ħo:ʃ ʒlisna be:t si:d mħammad be:t sittu biz^sz^sabt^s

9. fil madi:na ?aklahum waħda marra sawwo:lna ruzz ʕarabi kaːn marra mumtaːz

10. ?al-*§i:d ?ana kunt mifas^sfil to:b wkunt miz^sabbit^s ?umu:ri ruht ʒlast ma§a maːma fwajja* ?afu:f ?e:f ra:h ħajsawwu feːn ħajru:ħu ba§deːn kallamt al-?awla:d ?illi gaddi fil §eːla ta§aːlo:li **?aʒi:kum** madri ?e: ħanru:ħ as[§]-s[§]ala: ma§a ba§ad[§] feːn ħanwaggif zaħmat alma[ħadd wzajj kida wbass §adda ?awwal joːm t[§]abi:§i

Translation:

1. A group of friends came to stay at mine in Jeddah, to go on a boat trip, and one of them was Mohammed (my nephew). At first we did not want to go because we had arranged to meet the boat's captain at 5.30 am, which was too early for us to get up.

2. But in the end two of us got up early and managed to wake us up and we arrived at the boat at 7, where the captain had been waiting for us.

3. Even though it was very difficult for us to get up, we did noe regret it because we enjoyed the boat trip from 7.30 to midday.

4. This holiday I went to Jeddah and stayed with my friends for ten days. Then I returned to Medina because I had to decide on the course I wanted to study at university. I was thinking either to go to the USA with my mum or stay here in Medina or go to university in Jeddah with Mohammed. I had all of these options in mind so I took some time out on my own to make a decision and in the end I decided to stay in Medina.

5. This was because first my family is in Medina and second I think the course here in Medina is good and also my father works at the Department of Education at the university of Medina so I will be near him and he could help me.

6. If I stay in this country there is no difference between the university in Medina or Jeddah.If I do not like it here I can always change and go to another university.

7. During the month of Ramadan my sleeping patterns were all over the place like everybody's. Sometimes I went out and sometimes my friends came over to my house. Nothing special.

8. Do you mean Mohammed's family, the one in Medina or the one in Jeddah? Once I went to Mohammed's grandparents' house in Jeddah and there was no body there and we stayed out in the garden.

9. Another time we went to Mohammed's grandparents' in Medina and they made us Arabic rice and it was perfect.

10. In Eid I was organised because I already had my *to:b* 'traditiond dress', which had been tailor-made for me. I went to see my mum to ask her what they were going to do for Eid. Then I called other boys of my age from our family to arrange the Eid gatherings and prayer together and where we were going to park because the traffic for *al-ma/hadd* 'the Eid prayer' is very bad. The first day went as expected.

Speaker 5: Old, female, Bedouin

1. ka:nat ad-dinja kullaha **bju:t** fa{bijja kullaha **dyi:ra:nna** kull ?ubu:hum we:f ?agullik ma:tðakkar **minnhum** fajj ja{ni li?ann xamsi:n sana mahi bissa:hil

2. kint ?aruːħ al-ħaram Sala **rdʒuːli** min beːtana falħarra bawwal al-ħarra ?inn kint ?aruːħ ?as^sallija al-Sifa was^sallija at-taraːwiːħ **wardʒaS** lbeːt **wardʒaS** ?as^sallij **it-tihidʒdʒid** wadʒi Sala **rdʒuːli**

3. madymu:Sa madymu:Sat ħari:m balħa:ra maθalan al-dyara:t kull jitilajjamu:n winru:ħ ?illi Sindaha bint kida ?ummraha θalat^st^saSf ?arbaSt^saSf txalli:ha Sind ?ixwa:naha tintibh lalbzu:ra jaSni in-na:s ka:nat wilfa ?e:f ?agullik mitwa:lfi:n ka:nat wilfa wilfa mu: zajj aljo:ma

4. **?al-dʒa:r** maː jadri ʕann dʒa:ra ʔal- ʔaxu maː jadri ʕann ʔaxuː laʕ kaːn ʕindana xałaːsˁ dʒa:rak ʔaʕazz minn ʔaxuːk ʕindak kulluhum jadd waħda ʔinn dʒaː faraħ jadd waħda winn dʒa: hizin jadd waħda ʔajj maː jidʒi kullu

5. daħħiːn jabintijal ʕamaːjir **dʒaːrak** janzil ʕindak jiʃìd maːtadriːn maːtʕarfiːn laːkin min awwal laː **dʒaː al-dʒaːr** nazal ʕindik sˁaħb al-beːt **jikallm al-dʒaːr** ʔilli sakan jiruːħ leh jisallim ʕaleh keːfak ja **dʒaːri** ʕasaːk tˁajjib ja **dʒaːri** maθalan tara al-ʕaſa ʕindanal leːla ʔint wahlak jisawwiːla ʕaſa jaː jaðbaħleh jaː jsawwiːla kullin **wigidrtu**

6. jitilajjamu:n kull al-ħaːra jidʒuːn ʕaſaːn jitiʕarrafuːn **fal-dʒaːr il-dʒidiːd** wilkulluhum jitiʕaːzimunah maː jaːxuð ʔusbuʕeːn ʔilla huw daːxil maʕaːhum kaʔannahum ʔuxwaːn ʔalħiːn kull at-tagdiːr haːða raːħ maːla ʔaθar marra

7. ?ana maʕaːja marað^s **birdʒuːli** wmaʕaːja rrija ʕindi taʕbaːna **wimsawwja** ʕamalijjat galb maftuːħ wmaː?agdar min hina min **al-madʒlis** haːða ?il **ɣurfti** ?atʕab magdar ?amʃi 8. Sind al-baːb as-sajjaːra waːgfa baʕðˁ al-marraːt ʔinn min **ɣurfti lbaːb al-Smaːra** ʔinni ʔatʕab gult lalsawwaːg jalla nibɣa **nruːħ nʃuːf** al-ʕatˁa ʃufna keːf mahduːm keːf al-ʔamaːkin kullu hadad

9. haːða maːfiː min ?awwal Sinduhum maːfiː haːða mahu gabiːli whaːða mahu gabiːli kulluhum zajj al-as^sabiS kulluhum ?illi jadxil **maShum** kulluhum sawa

10. naːxið Sann baSað^sna sanate:n sana whu: wifinhu willi jlimmina hu: ?aſkal **la:j dʒi:bana** lbaSað^sna salaːmatkum baSð^s al-ħizin ħatta **al-dʒuwaza:t** baSð^s al-marraːt **tidʒi** winruːħ **nfu:f** baSað^sna wbaSð^s al-marraːt manſuːf baSað^sna

Translation:

1. In the past all the houses were very basic made from mud and stones and I knew all of our neighbours but what can I tell you, I do not remember them now because fifty years is a long time ago.

2. I used to walk from our neighbourhood, which is at the beginning of *al-ħarra* to the Mosque. I used to go to pray *fifa* 'the last prayer of the day' and *at-tara:wi:ħ* 'a prayer during Ramadan' and return home and then I would walk to the Mosque to pray *it-tiħadʒdʒid* 'the last prayer in Ramadan'.

3. We would form a group of female neighbours and we would walk to the Mosque together. And if anyone had a daughter who was 13 or 14 years old we would leave her to look after the younger children. This means we had strong bonds and we helped each other, not like today.

4. Today neighbours do not know each other nor do family members. In the past, your neighbours were dearer to you than you family (maybe your brother). We were like one family and everyone helped each other in both happy or sad circumstances.

5. Nowadays, because we live in high rise blocks of flats if you have new neighbours, you do not get to know them but in the past when you had a new neighbour, the landlord would visit him to find out about him to see if he is ok and would then invite the whole family for dinner. The landlord would prepare a special feast (a whole sheep), for example, depending on his income.

6. All the other neighbours would be invited and would come to get to know the new neighbour. And then the other neighbours would invite the new one and within two week they become like family. Today all of these traditions have disappeared.

7. I suffer from problems with my feet and my lungs and I had open heart surgery so I find it difficult to walk from this living room to my bedroom.

8. The car is parked outside the front door and if I walk from my bedroom to the outside door I get very tired. One day I told the driver "let's go to *al-fat^ca* 'a neighbourhood in Medina'.
When we got there I saw that the whole area had been pulled down.

9. In the past, there was no difference between people whether they had tribal affiliation or not and everyone had the same status. They were like one group.

10. Today, as a society we tend not to see each other for a year or two and it is usually during sad circumstances that we get together. Because for weddings sometimes we go, sometimes we do not.

Speaker 6: Middle-aged, male, Bedouin

1. ?illi maʕa: **flu:s** jagdar jikawwin min al-maljo:n maljo:ne:n willi ma: maʕu ma: jagdar **jiʒi:b** mijjat ?alf keːf **jiʒi:baha** laːkin al-maljo:n ?iða ʃaɣɣaltah **jiʒi:blak** maljo:n wnus^ç maljo:ne:n mumkin **jiʃaɣɣilk** laːkin ?illi ma: maʕu keːf jiʃtiɣil ?al-mijjat ?alf tˁasˁʕab ʕale:

 wnus^ss^c al-Sa:lam daħħi:n sa:kin maSabu: maSaxu: maħad jiftiri wan-na:s ?illi tfu:fahum ðo:l maShum flu:s waSma:rahum s^sya:ra jaSni Sma:rahum s^sya:r ja: talga:hum fwirθ t^sa:jiħlu ja: ?ara:ð^si ka:n ?ubu: jiftiri:ha rxi:s^sa wbu: majjit daħħi:n du:baha yalat jibi:Su:naha bil mala:ji:n wit^st^sałłiShum

3. wallalli bada? jabda? ħaja: ʒidi:da ma: jagdar jiʒi:baha bissuhu:la la:kin ?illi wa:riθ la? **jiʒi:baha** bissuhu:la s^caħħ ?inta t^ca:lis maljo:n t^casssab sale:k ?int ke:f **tlimmaha** la:kin ?iða masak maljo:ne:n ma: jasssab sale:k **tdʒi:b** ?arbas malaji:n **tʃayyilha** s^caħħ ti/tiri ?ara:ð^ci witbi:s walla ?ajji **tdʒa:ra** ti/tiyilha

4. laːkin **jawmijjatk** law **jawmijjatk** fil joːm miteːn **rjaːl** tiʃtiɣil θalaθmijja **matdʒiblak** weːn alħajaː mahi miθil ?awwal jaʕni taɣajjarat marra

5. willi Sale: dzamSijja ja:kul wjafrab ke:f jiftiyil ma: jiftiyil s^saħħ **?al-dzamSijja** al-xajrijjar ja:xið **minnha** walla að^s-ð^sama:n al-?iztima:Si jas^sriflah tisSumijjat **rja:l** walla ?alf **rja:l** ke:f jizi:b minnu mustaħi:l min al-mustaħi:la:t s^saħħ walla la?

6. du:bu ja:xið mnal **dzam\$ijja** wja:kil wjafrab wisaddid mo:ja wisaddid kahraba wisaddid **dzawwala:t** s^{\$}aħħ

7. kull fajj yała al-bibsi zama:n ka:n bnus^ci rja:l baSadha birja:l daħħi:n birja:l wnus^cs^c kull fajj za:d nafsaha hi: bxamsa walla **bSafra ?irtfaSat ?irtfaSat** il-mawa:d il-yiða:?ijja ?inta kunt **tSabbi** banzi:n bxamsa rja:l wdaħħi:n **bSafra** 8. walbibsi zaːd **?ad-dudʒaːdʒ** zaːd ar-ruzz kamm an-nafar bθalaːθa rjaːl daːħħiːn bsitta rjaːl wbxamsa rjaːl **waddudʒaːdʒa** kaːnati **bʕaʃra** daħħiːn barbaʕtˤaʕʃ sˤaħħ **tziːd** kull ʃajj zaːd

9. ramað^sa:n ?ana tiðakkar gabl al-kahraba **tizi** sajjidna hamza **nbil** if-fara:fif mo:ja witiyat^st^sa fi:ha la:kin ka:n as^s-s^so:m ?ashal min daħhi:n daħhi:n maSal ?afya:l ?awwal ma:fi ?afya:l

10. daħħiːn id-dinja maʕa dˁyuːtˁaːtˁaha ħattal ʕaskari kaːnat ʕadad as-sukkaːn kamm ʔal-ʔaːn kamm ħatta law **al-mʃaːkil** kaːnat jaʕni **tˁsˁaːdif** maθalan fiʃ-ʃahar xams **mʃaːkil** daħħiːn maʕa kaθrat an-naːs **tˁsˁaːdif** kull joːm **ʕaʃara maʃaːkil** maʕa kuθrat atˁ-tˁatˁawwur walbinjaːn tˁatʿawwur al-madiːna mahu miθil ʔawwal ʔakiːd

Translation:

 If someone has, for example, one million he can make 2 million and if someone has no money he cannot make even 100.000. If you do not have any money how can you make any?
 But if you had one million and invested it then you could make a million and a half or two million. But if you do not have any money, the 100.000 will be very difficult to make.

2. Today half of the people live with their parents or brothers so nobody buys anything. And the ones you see that have money and are young they have either inherited money from their fathers or that their fathers had bought land at a cheap price and now their fathers are dead and the price of land has gone up and now they sell it for millions and they become rich.

3. But anyone who starts a new life cannot make money easily, but those who inherited money can make money. Mind you, one million is very difficult to save but if you have two million you can make four million by investing it in land or in any business.

4. But if your daily wage is two or three hundred riyals, you cannot make money. Life is not like before; it has changed completely.

5. And if you have to pay instalments and of course you have to eat and drink, you cannot invest or do any business.

6. And if you get social benefits like 900 or 1000 Riyals it is impossible to make any money. As soon as he gets the benefits, the only things he can do is to eat, drink and pay the electricity and telephone bills.

7. Everything has become more expensive, for example, a can of Pepsi used to be ¹/₂ a Riyal but after a while it went up to 1 Riyal, now it is 1 ¹/₂ Riyal. Everything has become more expensive such as food. You used to fill your car up with petrol for 5 Riyals now you pay 10 Riyals.

8. The Pepsi and chicken have gone up. Rice also because you used to buy a portion for one person for 3 Riyals, now the same portion is 5 or 6 Riyals. A piece of chicken used to cost 10 Riyals now it is 14.

9. I remember Ramadan before we had electricity in the neighbourhood of '*sajjidna ħamza*', we used to soak the blankets with water and cover ourselves with them but fasting was much easier than now because now we have to go to work whereas before we did not.

10. Today life has become very stressful even for the policeman, because in the past the population was less than today. For example, in the past we would only have five incidents a month, now with the increase in population everyday we might have ten incidents. The recent developments and modernisation have changed Medina a lot.

Speaker 7: Adult, female, Bedouin

1. nru:ħ al-maza:ri\$ **naʒlis** fi:ha nal\$ab **ʒalsa:t** wsawa:lif ma:fi li\$b **m\$ajjan** t^{\$}u:l al-jo:m wiħna filmazra\$a

2. dʒaːbni ?abuːj ʕaʃaːn jidaxxilnil madrasa fil madiːna ʒiːt hina daxalt wabuːj wummi finnxeːl ʒalast ʕind ?axuːj filmidina ?axuːj fuð^si ?akbar axwaːni maʃi nruːħ giriːbal madrasa

3. kunt ?a§gal waħda fil madrasa kullaha kint mumta:za kint mutafawwiqa ?a§t§uni hadijja sa:§a s§aff ?u:la ?al-§a:b al-bana:t al-§a:dijja ?alli §ara:jis s§aɣi:ra ha:di hada:ja af-fa:t§ra almutafawwiqa ji§t§u:naha fara:jit§ ħamra jħit§t§u:nlaha

4. xaːmis ?illi kint fiːha maː muſ walabud jaʕni ?ablat al-ʕarabi kaːnat ſadiːda bass filʕarabi kint mumtaːza firrijaːðˤijjaːt ?aħibbaha ?al-mutˁawasˁsˁitˁ maʕal banaːt maʕa ſillat al-banaːt wanaːst al-banaːt ?illi muː fil madrasa kint ?ajjaːm **al-ʔiʒaːza** xamiːs **wʒumʕa** ?atˁlaʕ maʕa xawaːti wbanaːt ?uxwaːni **ʒamʕaːt** wħaflaːt w?awgaːt ħilwa

5. nitdʒamma\$ foːg s^sat^sħ foːg **\$maːrat** s^sat^sħ waːħid min uxwaːni wnil\$ab biskileːtaːt kiθiːr kinna sab\$a θamanja banaːt

6. ka:nat bisi:dal mutsawasssits **nru:h** fal ba:ss **nru:h wnizi** masal ba:ss **nyi:b nazlis** falbe:t la?**jarzas** marrite:n ?illi tat?axxar **tarzas** marra θa:nja **jarzaslaha**

7. niħaːjat al-?ibtidaː?i wajjaːm al-mut^cawas^cs^cit^c kaːnat ʔaħla ʔajjaːm maʕa xwaːni wanaːsa maʕa xwaːni walliʕb t^całʕaːt^c barr wliʕb wwanaːsa ʔatðakkar fiːha t^card^c al-ʤaraːbiːʕ

 wt^sard^s aθ-θasa:bi:n nat^slas al-barr w ndawwir sale:ha le:n nla:gi:ha wnat^srid^sha ma: kinna nsarif al-xo;f s^sya:r

9. kinna ħinna **naʒri** waraːha **naʒri** wara θθuʕbaːn wuxti ʔilli ʔasˁɣar minni tamsikah **bjaddha tˁtˁallʕih** tamsikeh bjaddeːnaha

10. nit^clas masabu:j min s^cała:t **al-fazur lbasd** al-sas^cur basde:n **nirzas** al-be:t

Translation:

1. We used to go to farms. We sat, played and chatted there. We would spend all day on the farm. We did not use to play specific games.

2. My father took me to Medina so that I could go to school. I stayed with my eldest brother ' $fu\delta^{i}i$ ' in Medina while my parents were in the village 'in-nixe:l' and I used to walk to school as it was near our home.

3. In school I was very well-behaved and a brilliant student and because of this they gave me a watch as a gift because they used to give the brilliant students gifts like small dolls. The best students would wear a red ribbon pinned on her uniform.

4. When I was in the 5th grade I was not that good because the teacher of Arabic was very tough but I was very good in maths because I loved it. When I was in secondary school I would enjoy my free time with the other girls. At the weekends, Thursdays and Fridays, I would go out with my sisters and their daughters to social gatherings and parties.

5. We used to gather on the flat roof of my brother's building and we used to play bikes. There were seven or eight girls in our group.

6. The secondary school was far away so I used to go to school by bus and If the bus did not come or if we missed it, we were absent from school and we stayed at home. But at the end of the day there were two bus runs so if anyone missed the first bus, it would return to pick her up.

7. The end of my primary and my secondary school years were the best days. We used to go out in the desert with my brothers and play a lot and I remember during these times we chased gerbils.

8. And we chased snakes in the desert. We used to look for them until we found one and chased it. We were not scared because we were very young.

9. We used to run after the snakes and my younger sister would grab them with her hands.

10. We used to go out with my father from dawn prayer until just befor sunset and then we returned home.

Speaker 8: Young, male, Bedouin

1. ?as-sirja:ni ti\$rifi sirja:ni ha:ða **3aza:?iri** ?as^{\$}lu **3aza:?iri dʒa:j** mn **al-dʒaza:?ir** ja\$ni min fatra fatra t^{\$}iwi:la wal?a:n ju\$tabar su\$u:di ?ana \$rif na:s **3a:jji:n** mnal-jaman wal?a:n su\$udijji:n whumma ?as^{\$}lahum mnal-jaman ?a\$rif na:s **3a:jji:n** mnas-su:da:n ?al-?a:n su\$udijji:n

2. binnisbal ?ahl al-madi:na ?ana ſuːſ **?innahum** jaʕni ?akθar naːs jitigabbaloːn al-ħaðˁur li?annu jaʕni tˁalʕati jaʕni ?eːſ ?ismu liskaːka gaːbalt naːs badu badu jaʕni mutmassik bi?sˁuːlu mutmassik b?asˁlu jaʕni ?ana wlaːd gabiːla laː kinnu jinðˁurli bnaðˁra ɣariːba li?annu hnaːk gabaːjilhum tixtalif

3. maː **Sinduhum** maː **Sinduhum** Soːfaːn maːfiː jaSni ?ana tagriːban ?awwal waːħid ħatta **Sada:thum** maːSrifha Sada:t tixtalif kiθiːr **Sada:thum** ?akθar ʃajj jaSni jisiːr fiː ?ixtilaːf ?ixtilaːf Sindana as-salaːm t^sariːqat as-salaːm

4. ħinna ħarbijja jsammi:ha ?illi hij waħda Sal jami:n waħda Sal jasa:r humma hna:k la?
 Salal jami:n sala:mhum Salal jami:n marrate:n θala:θ fahna:k ?uslu:bahum jixtalif hna:k
 mitmaski:n tara bSada:thum

5. hna:k jaSni lissa jaSni ħattallif Sumri Pana lissa juStabaru:n badu jarSo:n yanam wbil wħała:l wkull ſajj la:kin Piħna hina xal:s^s Sa:di nuStabar tagri:ban ħað^sur

6. ?al-farg ?innu hnaːk zajj **?agu:lha** liki bsʿaraːħa jaʕni hnaːk kull gabiːla laha **ʒalsa** jaʕni maθalan **hnaːk** maθalan maʕannu giliːl al-ʕitbaːn **hnaːk** lakinnu ʕteːbi xałaːsˁ maʕa ʕteːbi

7. ?al-madi:na ?ana maStabir fi:ha ?s^su:l jaSni mu: ?as^slu min al-madi:na kull ?ahl al-gaba:jil **3ajji:nlahal** madi:na fi:ha jaSni min kull fakil kullanal ħi:n kullana min ?ahl al-madi:na ma:fi jaSni ħarbi ma:fi jaSni madri ?e:ſ kullanal ħi:n **3ajji:n** min barra **3ajji:n** lal-madi:na li?annul madi:na ?awwal jaSni maka:n fi:ha ?aħad gili:l Sala kala:m al-badu Sala kala:m ?aʒda:dana wkida maka:n fi: ?illa be:t be:te:n

8. (back to his studies) kunt ?afakkir ?aħawwil ħaːsib bass jaSni mu: kθi:r ?illi mdaħħa li: jaSni fuft naːs kiða kθi:r maːmdħoːħa li xałaːs^c ?agSud wfi: jaSni ?aɣłab ?illi maSaːja fil ?aħja:? tagri:ban tisSi:n fil mijja minnuhum jibyu:n jikammilu:n maːʒiste:r barra bass ?ana maːħibb al-xuruːʒ jaSni xaːs^cs^cat^can mnal madi:na maːfi: raːħa al-madi:na lħaːlaħa tikfi

9. ?al-ħiːn Sindana jaSni sajjaraːt **nruːħ** maħal maː nibɣa jaSni bass nimsak at^s-t^sariːg wiruːħ al-makaːn ?illi ?inta tibɣa **wirʒaS** maSa s^sħaːbi **dʒalsa** beːn ħað^sar wbadu **wniʒlis** fil xaːldijja ?aɣlab **ʒalsatna** hnaːk ?ana **ʒalsati** barra fiʃʃaːriS fmuntazah nilSab baloːt ?itnaSʃar saːSa tmur **ka?annaha** digiːga.

Translation:

1. The family of *?as-sirja:ni* do you know them? Their origins are Algerian. They came from Algeria a long time ago and now they are Saudi. I also know people from Yemen and now they are Saudi. Likewise, I know people whose origins are from Sudan and now they are Saudi.

2. Regarding the people of Medina, I see that they are the ones who integrate with the urban community the most because I went up and stayed in *ska:ka* and I met people there who are very, very Bedouin. They are very conservative, for example, although I have a tribal affiliation they consider me as an outsider because their tribes are different.

3. They do not have people from the clan of *al-So:fi*. I am almost the first one they have met from my clan. I do not even know their traditions because they are different. The most different tradition that distinguishes us is their way of greetings and kissing.

4. Ours is called *harbijja* which is one on the right and one on the left. Theirs is only on the right, twice or three times. Their customs are different and they follow them strictly.

5. There, even the ones who are the same age as mine are considered very Bedouin in that they shepherd sheep, camels or any other animals. But we here in Medina are considered as urban.

6. I have to tell you the truth that the difference there is that each clan is physically separate from the other clans. There, eventhough there are only few people from the clan of *al-Ste:bi*, an *Ste:bi* will sit with an *Ste:bi*.

7. I do not consider that Medina has an indigenous population because all of the tribes came to Medina from different areas because according to the Bedouins and our grandparents, Medina had only a small population, one or two families only.

8. (Back to his studies) I wanted to study information technology but not many people recommended it. Then I told myself to continue doing my biology course. Ninety % of my classmates want to do a Master's degree abroad. But as far as I am concerned I do not want to travel and leave Medina. I only feel at peace in Medina. Medina is enough for me.

9. Now we have cars and we can do wherever we want. I usually go out with my friends and mingle with both Bedouin and urban friends in *al-xa:ldijja*. Most of our gatherings are there so we can sit outdoors or in parks and we play card games and twelve hours pass like one minute.