Phonological variation and change in Mesopotamia:

A study of accent levelling in the Arabic dialect of Mosul.

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Thesis submitted to the Faculty of Humanities, Arts and Social Sciences in accordance with the requirements for the degree of Doctor of Philosophy (Linguistics)

School of Education, Communication and Language Sciences

Newcastle University

October 2018

Dedication

To My

Heart, soul & life

Hussein, Yaseen & Yousif

Acknowledgements

Firstly, I would like to express my sincere gratitude to my supervisors Dr Ghada Khattab and Dr Damien Hall for their continuous support of my PhD study and related research, for their patience, honesty and immense knowledge. Their guidance over the last few years helped me in all the time of research and writing of this thesis. I would like to thank the following people for their kind support and help throughout my study: Dr Jalal Al-Tamimi and Dr Danielle Turton for their very helpful comments and suggestions on various things of the study. I would also like to thank Daniel Ezra Johnson for his support in conducting the statistics in this study. My sincere thanks to my colleague Maha Jasim who helped in many things especially checking the segmentation of the data. Very special 'Merci' goes to Maelle Amand for her immense help. I would also to thank all the people of Mosul and others who helped in various capacities in this study, particularly Ahmed Salama, Khalid Ibrahim Alahmed and Ekhlas Muhsin and Dhiaa Kareem.

An everlasting 'Thank You' goes to Rosalie Maggio, Janet Atwill and Annabelle Lukin. I would also like to acknowledge the support of HCED (Iraq) for sponsoring my studies, without which this work would not have been possible.

Without the precious support of the people above, it would not be possible to conduct this research. Last but not the least, I would like to thank my family for their immense help, patience and care throughout this journey.

Declaration

The material presented in this thesis is the original work of the candidate except as otherwise acknowledged. It has not been submitted previously in part or in whole, for any award at any university, at any other time. Some early material of this thesis has already been published by the author in the form of three articles in three different journals. These run as follows:

Yaseen, A. (2015a) 'Accent levelling and maintenance in Maṣlāwi Arabic: A preliminary investigation', Annual Review of Education, Communication and Language Sciences (ARECLS), 21, pp. 1-23.

Yaseen, A. (2015b) 'Qaf in Mosul Arabic: Levelling or resistance? ', Newcastle Working Papers in Linguistics, 21.2, pp. 64-80.

Yaseen, A. (2015c) 'Dialect loss and vitality in Mosul, Iraq: A postscript', Humanities and Social Sciences Review, 5(2), pp. 453-472.

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Transcription and Transliteration

The International Phonetic Alphabet (IPA) created by the International Phonetic Association was used in the transcriptions featured in this study.

The transliteration scheme used in this study follows that adopted by Fischer and Jastrow in *Handbuch der Arabischen dialekte* (1980). This is often used in the literature on Arabic linguistics, e.g. *Encyclopedia of Arabic language and linguistics* and Journal of Arabic Linguistics. Below is a list of symbols used in the transliteration along with its equivalent broad IPA (International Phonetic Alphabet) forms. Some exceptions were also made, particularly for place and personal names in which *x* and *ǧ* were replaced by (Kh) and (J) respectively as in 'Khalīl', 'Karkh' and 'al-Jāḥiẓ'. These are more common Anglicised transliterations in these two contexts. It should also be noted that in Arabic dialectology, the palatal approximant /j/ is often notated as *y*. This latter notation will be used in the transliteration scheme applied in this work while the former will be used for transcription.

Consonants

Transliterated form	IPA	Transliterated form	IPA
ʾ	ʔ	*ḍ*	dˁ
b	b	*ṭ*	tˁ
t	t	*ẓ*	ðˁ
ṯ	θ	ʿ	ʕ
ǧ	dʒ	*ġ*	ɣ
ḥ	ħ	*f*	f
x	x	*q*	q
d	d	*k*	k
ḏ	ð	*l*	l
r	r	*m*	m
z	z	*n*	n
s	s	*h*	h
š	ʃ	*w*	w
ṣ	sˁ	*y*	j

Vowels

Transliterated form	IPA
a	a
ā	aː
i	i
ī	iː
u	u
ū	uː

Diphthongs

Transliterated form	IPA
ay	aj
aw	aw

Dialectal Forms

Transliterated form	*IPA*
č	tʃ
g	ɡ
ō	oː
ē	eː
ə	ə

List of Abbreviations

Analysis of Variance	ANOVA
Christian Baghdadi Arabic	CBA
Educated Spoken Arabic	ESA
Feminine	f.
First formant	F1
International Phonetic Alphabet	IPA
Iraqi Arabic	IA
Jewish Baghdadi Arabic	JBA
Lower Middle Class	LMC
Masculine	m.
Maṣlāwi Arabic	MA
Muslim Baghdadi Arabic	MBA
Middle Class	MC
North-eastern Neo-Aramaic	NENA
Noun	n.
Old Arabic	OA
Second formant	F2
Singular	sg.
Standard Arabic	SA
Voice onset time	VOT

Abstract

This study investigates current patterns of phonological variation and change in the dialect of Arabic spoken in Mosul (MA), Iraq.

Four traditional phonological variables of MA, two consonants and two vowels that are hypothesised to be undergoing change in this dialect were chosen for analysis. The consonant variables are the rhotic variable and the variable *qāf* or (q)[1]. The two vocalic variables are the realisation of MOSUL vowel[2] and word-final (a)[3]. These variables were subjected to auditory analysis (consonants) and acoustic analysis (vowels). The extracted data were subjected to statistical analysis using mixed-effect linear and logistic regression models using R and Rbrul.

Results reveal that there is more to the variation in these variables than what has previously been inadequately described in the literature. These results provide fresh insights on the structural and social behaviour of the variables investigated and establish that the existing traditional variants (notably the rhotic variable and MOSUL vowel) are across-the-board and challenge constraints previously described in the literature to be at play in their behaviour.

Results suggest that Maṣlāwis show linguistic and social variability in the use of the variables assessed in this study. Speakers did not show much variability in producing the (q) variable with the traditional variant [q] is well maintained by all speakers. Results also offer tenable evidence that a process of levelling is occurring in MA in that traditional phonological forms of MA are becoming recessive in the speech of younger generations, albeit not in a wholesale fashion. This was evidenced by the decreasing use of local forms of the rhotic variable (i.e. uvular realisation) in the face of the supralocal apical form. A similar trend has also been found in the realisation of MOSUL vowel and word-final (a) in that the traditional (in height, advancement and duration) realisations of these two variables is also decreasing.

It is suggested that the change in MA is due to a number of largely sociopolitical and economic factors that have resulted in bringing people of Mosul in contact with swathes of migrants largely of Bedouin backgrounds. These factors have also been operating in other Arab and Western settings notwithstanding particularities. The study also puts this change

[1] It should be noted that the notation (q) or *qāf*, which is the 21st letter in Arabic alphabet, will be interchangeably used to denote the variable while /q/ and [q] will also be used to denote phonemic and phonetic qualities, where applicable.

[2] It concerns the realisation of /uː/. For the sake of clarity and convenience, I notated this variable by a mnemonic keyword: MOSUL, which itself has the realisation of traditional of the vowel [oː]. The use of keywords was first proposed by John Wells (Wells, 1982) and is now a common practice in this type of studies. The small-cap word (MOSUL) will be used for denoting the variable to avoid confusion with the word Mosul (the city).

[3]This variable will be notated as (a) when referred to as a sociolinguistic variable. However, a phonemic or phonetic notation will also be used, where applicable.

within the wider context of Iraqi Arabic (IA) to reconstruct a three-wave model of change that occurred in Iraqi Arabic dialects. This is to draw the big picture of the situation of not only Mosul but also other *qeltu*-speaking areas, which undergo rather similar linguistic and non-linguistic conditions.

Chapter One: Introduction

1.1 Introduction

The area of language variation has long been a rich line of linguistic inquiry. However, although considerable strides have been made in this scholarly tradition, much still remains to be investigated. This is perhaps nowhere more applicable than in areas like Iraq where a rich source of language variation does exist but relatively much of it remains uncharted territory. As we will see below, there are several lines of gap-filling and contribution that this topic can contribute to. This study was conceived in order to go some way towards this end.

Albeit largely anecdotal and impressionistic in nature, evidence has been accumulating that distinctive dialects of Iraqi Arabic such as the one spoken in Mosul are undergoing change. This change is believed to have resulted from a large-scale change in the demographic composition of those areas of the country following a series of economic and sociopolitical events. This study seeks to provide a quantitative account of phonological variation and change in the dialect of Arabic spoken in Mosul (henceforth MA), Iraq. It is intended to build on and contribute to the existing research by investigating a set of phonological variables that are hypothesised to be showing variability and change in this dialect.

As will be highlighted below, the aims of this study are motivated by sporadic findings and anecdotal references in the literature that suggest a decline in the use of traditional dialects of Iraqi Arabic in the face of a more dominant dialect. This is in addition to the gaps in the literature, which will be highlighted later in this chapter. In doing so, this research seeks to answer a number of questions (presented briefly in this chapter and then fully discussed over the course of this thesis) in reference to a number of concepts and models. Prior to going into these in detail, the following is an overview of the structure of the study.

This thesis is divided into twelve chapters including this introductory chapter. Following a description of the structure of this thesis, this introductory chapter gives an overview of the reasons and motivations for this study. It also highlights gaps and limitations in the literature on Maṣlāwi[4] Arabic (MA) and Iraqi Arabic in general. Chapter 2 gives a brief overview of Iraq as well as a glimpse of its history and the structure of its population. There follows a description of the linguistic profile of the country. This chapter also includes a summary of the main works we have on Iraqi Arabic as well as an outline of its phonology.

[4] Maṣlāwi (derived from Mosul) is the label often used, whether academically or otherwise, to describe a native of Mosul as well as the dialect spoken by the people of this city. ‘Mosulli/Mawsilli’ is also sometimes used but is less common.

Chapter 3 reviews the main dialect groups in Iraqi Arabic—also known as Mesopotamian Arabic[5] (Blanc, 1964)—as well as the literature on them. These groups include the social, geographical and ecological classifications of dialect groups of Iraqi Arabic. Of special importance here are the two dialect groups: *gelet* and *qeltu*[6] with the latter being the dialect group to which Maṣlāwi Arabic belongs.

Chapter 4 focuses on Maṣlāwi Arabic and the community in which it is spoken. It gives a general overview of this dialect and its linguistic profile. This involves historical, geographical and social aspects of Mosul and Maṣlāwi Arabic in addition to the main phonological features that distinguish this dialect from other Iraqi Arabic dialects. The social and demographic particularities of the community of Mosul are also presented in a subsequent section of this chapter. This chapter also situates Maṣlāwi Arabic in its wider linguistic frame, historically and socially. Considering the background of Mosul's community will be important to understanding the anticipated results of this study.

Chapter 5 discusses the main concepts (i.e. variation and change, dialect levelling, Bedouinisation and koineisation) underlying this study. It gives an overview of definitions and previous research on these theoretical underpinnings and the research on them. The chapter also reviews the precipitating factors of linguistic change in Iraq and Mosul. These include social and political upheavals that have resulted in waves of internal migration to the city that have turned the society of Mosul into a mix of people of both sedentary and Bedouin backgrounds. Mosul has consequently turned into a setting in which a noticeable contact between urban and rural/Bedouin values has become the norm. In this light, the expected linguistic change in the speech of Maṣlāwis is assessed. These will be sketched in this chapter and then discussed in chapter 11.

Chapter 6 deals with the methodology implemented in the present study. It sketches the main methodological approaches pertaining to the analysis of this study. Given Mosul's multiethnic society, this chapter also includes an account of the peculiarities of the community of speakers whose speech is investigated in this study. This involves defining 'the sampling universe' (Sankoff, 1974), which is the particular groups or communities to investigate. Watt (1998, p. 5) highlights that this type of information is always valuable in comprehending the patterns of the community's speech behaviour. This, in fact, is even more the case if it is a large urban

[5] The term was constructed by Blanc since the dialect in its different forms can be found throughout the ancient Mesopotamia in a rather complex dialectal distribution as will be discussed in the study. Blanc (1964, p. 181) notes that the dialects spoken in the area, which covers "all the Tigris and Euphrates valleys and the areas between them, from the sources on the Anatolian plateau down to the Persian Gulf" share common features and can thus be labelled Mesopotamian.

[6] These terms will be explained in detail in chapter 3.

setting subsuming different types of people. This chapter also provides a description of the data and the approaches (elicitation techniques, topics, recording conditions, etc.) employed in eliciting the speech data. A number of variables chosen for analysis in this study are listed. The reasons for their inclusion in the study are also described prior to a discussion of each variable in dedicated chapters. There follows a discussion of the linguistic and non-linguistic (social) factors against which the speech behaviour of the speakers is assessed. The remainder of chapter 6 presents an account of the analyses conducted in this study. This includes a presentation of the software, tools and statistical techniques used.

Chapters 7 to 10 are dedicated to the individual variables investigated in this study. These chapters include an overview of the envelope and contexts of variation reported for each variable as well as an overview of the existing studies on them. Chapter 7 explores the rhotic variable, the first of two consonantal variables in this study. In this chapter, a historical and linguistic overview of this variable is provided and its social and geographical distributions are sketched. There follows a section that sets out the analysis conducted on this variable.

Chapter 8 investigates the realisation of *qāf* or (q) in Mosul, which is prototypically realised as a uvular plosive [q] in this dialect compared to a number of variants (including [q]) in *gelet*. This chapter reviews the previous literature on this variable and the change reported in its realisation in different Arabic dialects. It also outlines the main variants of this variable in Iraqi Arabic before giving a presentation and discussion of the results of the analysis. Chapter 9 and the following chapter deal with the two vocalic variables in this study: the MOSUL vowel and word-final (a) respectively. Like the other variables, each chapter presents an overview of each vowel with the existing studies and observations on each. In addition, each chapter will present a presentation and discussion of the results of each variable individually.

The key findings presented in the previous chapters are dealt with in depth in a unified discussion in chapter 11. This is to draw the broad picture of what the contemporary situation of Mosul and its dialect means in the local as well as the wider context of Iraqi Arabic, notably the *qeltu* dialect group. The final chapter of this study provides a summary of the major and important findings of the study along with the contribution that the study makes to the field. The limitations of this study as well as suggestions for further research are also provided.

1.2 Research aims and questions of the present study

This section outlines the research aims and questions that will guide the investigation of this study. The overall aim of the study is to provide an overview of variation and change as

regards a number of vocalic and consonantal variables of the Arabic spoken in Mosul in northern Iraq. It will use naturally occurring data to provide a detailed analysis of those variables and attempt to explain a change expected to be occurring in their production in Maṣlāwi Arabic. The study will relate the patterns observable in a number of external factors: social (principally age, gender and class) and linguistic (detailed for each relevant variable later). The findings will be compared with those of other dialects in the literature as current trends discernible in other areas, particularly in Iraq, are comparable to one another.

The aims and research questions that will guide the study are:

1) To provide a quantitative account of the current patterns of variation in respect of a set of phonological variables in a single dialect of Arabic, that spoken in Mosul in the northern region of Iraq.

a) *What phonological variation patterns and observations can be discerned from MA with respect to the variables investigated in this study?*

b) *How does this variation pattern across the linguistic and non-linguistic parameters in the speech behaviour of MA speakers? And how can these patterns be interpreted?*

c) *What change can be noticed in the use of MA? And to what extent have MA speakers preserved local features and /or adopted supralocal ones? And how can how can the change observed be interpreted?*

2) The study will exploit the linguistic situation of MA to advance/refine our understanding and interpretation of dialectal landscape in Iraq.

a) *What does the case of MA add to the overall picture of Mesopotamian dialects spoken in Iraq?*

b) *How can the findings from this study and those drawn from other qeltu dialects in Iraq inform and be informed by past trends observable in their development?*

1.3 Why this study?

1.3.1 Research gaps

This study is timely for several reasons. In the next sections, I shall try to account for the reasons behind this necessity in two ways. I shall first highlight the nature of the existing literature at the necessary level of detail. This includes the gaps in that literature and how this study could fit therein. Second, I shall also explain how this study and the issues it intends to address can contribute to future research.

Although research has covered many linguistic aspects of Iraq, the literature on its variability is still in its infancy. This is borne out by an almost complete lack of up-to-date variationist studies on this important research area. Previous literature has given us a number of contributions to Iraqi Arabic dialects, particularly from a descriptive point of view. A close look at the literature reveals that we are given a good picture of *qeltu* and *gelet* in the late nineteenth and early twentieth centuries. Along with early accounts (e.g. Oussani, 1901; Socin, 1882), we are given initial impressions of the dialects of *gelet* and *qeltu* in general through the works of Blanc (1964) and Jastrow (1978a, 1978b). The latter two-volume study delineated the social and geographical position of the *qeltu* dialect group based on observations gleaned from folk tales from different *qeltu* dialects in Iraq, Syria and Turkey. We also have some works (e.g. Abu Haidar, 1987, 1988a, 1988b, 1990, 1991a, 1991b; Jaber, 2013; Jastrow, 1978a, 1978b, 1990b, 1994; Khan, 2016; Mansour, 1991; Schramm, 1954) that give descriptions of the dialects spoken by the religious communities, particularly Christians, Jews and Muslims.

In view of the above, there is a need for more studies on variation as there are few of them (e.g Abu Haidar, 1992). We have a number of other studies (e.g. Abdul-Hassan, 1988; Abu Haidar, 1987, 1988a, 1988b, 1989, 1991a, 1992; Altoma, 1969; Mahdi, 1985; Mansour, 1991; Oussani, 1901; Palva, 2009) that have referred to traces of change in Iraqi Arabic dialects although they were not dedicated to variation and change issues. Many aspects remain unaddressed in the existing studies of variation, as will be reviewed later. For instance, age is one of the least examined aspects of any IA dialect. Bassiouney (2009, p. 123) points out that the youth population forms a majority in the Arab countries. This is perhaps evident in the statistics related to this population. The Arab world is a young region with the people under 15 and those between 15 and 24 constituting a third and a fifth of its entire population respectively (UNESCO, 2013). Yet, there are few studies that address their role in the linguistic behaviour of Arabic dialects.

The reason behind the lack of studies on variation and change has been recurrently discussed by researchers. The consensus is that topics relevant to variation and change have not been viewed as appropriate areas of research in most Arab countries. Another key reason agreed upon in the literature has been the turmoil occasioned by wars and political tensions that have strengthened this stance towards this type of work.

Iraq is one of the countries where this situation obtains. Palva (1983, p. 101) asserts that the paucity of studies on *qeltu* makes it an "urgent task" to do further research as this dialect seems to be receding in the face of *gelet*. Palva (ibid.) also suggests that further research on

this dialect group would extend our knowledge of the linguistic and cultural tradition of Arabic spoken in Mesopotamia. Another reference to the need for further research comes from Jastrow (2002, p. 351) who notes that many *gelet* as well as *qeltu*-speaking areas in Iraq still need a thorough investigation that would enormously contribute to the linguistic literature (a map of the linguistic areas of Iraq will be provided in the next chapter). Jastrow ascribes this lack of research to the unstable sociopolitical situation preoccupying those areas. Miller (2007, p. 10) agrees with this line of reasoning and ascribes the lack of literature to the political situation, which formed a major hindrance to advancing sociolinguistic and dialectological research in the region. This type of studies is also offered little if any endorsement by local research bodies, she asserts.

In Iraq, the study of language variation and change has not been an established field of research for reasons similar to those stated above. Most existing research on Iraqi Arabic dialects was conducted decades ago and is now in need of an update. The gap of several decades between the works reviewed earlier and the present study constitutes at least a generation. Therefore, it is likely that we will find some discernible changes in the linguistic situation of the area. Moreover, there have been considerable theoretical and methodological advances in the field of variation and change whereby approaches and techniques have been vigorously developed. These provide sufficient incentive to move towards making up ground with those advances.

As will be highlighted later in this study, the current state of affairs makes such a study a timely contribution to the literature as the (socio)linguistic situation in Iraq (or more relevantly in Mosul) may be at a point where the literature might be well served by examining this topic using modern techniques. This topic remains an area that has previously received little, if any, contemporary linguistic investigation. To the best of my knowledge, there has been as yet no investigation of this topic in Mosul, neither past nor present. Notwithstanding its limitations set out later, it is hoped it will provide new insights on Iraqi Arabic while updating the literature on a major dialect.

1.3.2 Other lines of contribution

In variationist sociolinguistics, the social and linguistic factors are often associated with structured linguistic variation and change. Assessing the particular linguistic constraints of the phonological variables under scrutiny will inform the distribution of those variables. As we will see in the chapters dedicated to these variables, there are several observations that have hitherto been claimed to exist. This study will assess these observations using the data of this study while providing some unreported aspects in that regard to help inform the phonology of

MA. The patterns of variation expected from MA would also be pertinent to the broader field of sociolinguistics in several respects. The behaviour of the phonological variables intended for analysis in this study and how they may be linked to social and linguistic parameters will bring into the discussion a number of related concepts and models. This would be an interesting contribution to the literature to bring a perspective from an insufficiently studied yet rich dialect of Arabic.

With this in mind, the study will assess three important social factors: gender, age and social class. The discussion of the role of these parameters in MA will come in brief here and in detail in several other places in this thesis. The research gaps that exist in the variability in this dialect give us all the more reason to further explore these important factors. For example, while the role of gender and social class in the variation of other dialects is well researched, it remains almost completely unvisited in many Iraqi Arabic dialects. Of note here is that the role of such categories can differ from one community to another. For example, accounting for gender-related linguistic patterns in MA would invite a discussion of the role of gender and its implications in this community. A robust finding in the literature on gendered variation, at least in the Anglophone world, is that females rather than males are usually the leaders of change. Holmes (1997, p. 199) notes that in Western cultures, women tend to have more interaction with outsiders than men. This stems from their performing of a number of household chores such as shopping, children schooling and bureaucracy-related dealings. Hence, the social contacts that women encounter doing these practices are broader than those of men. Britain (2010, pp. 201-202) points out that women have a greater possibility of assuming jobs in what he termed a 'spatially fluid linguistic marketplace' than men. These include jobs that are related to the tertiary segment of the economy such as services, retail and other service jobs. Britain notes that women also have a greater possibility of moving house than males, particularly in their adolescence.

Compared to that in the Western world, the gender situation in Iraq and particularly in Mosul is rather different. Due to cultural and religious reasons, women enjoy far less mobility than men do although different Arab societies do have varying sensibilities regarding the mobility of women. The Maṣlāwi community is steeped in tradition and maintains an awareness of family and religious values. Moreover, it affords males more opportunities of exposure to the outside world than females, as will be discussed later. Therefore, it is hypothesised that due to differences between Maṣlāwi men and women in their exposure to the larger community, we will find different results from those often reported on gender globally. The results of this factor will be compared to the Arab as well as the wider context of gender-related patterns

observed cross-linguistically. Gender-related findings from this study are expected to run counter to the patterns usually reported in the literature. These would contribute to the discussion on this area offering insights from an Arabic-speaking context.

Another related line of contribution that can be anticipated from this study is the examining of the theme of levelling, which is believed to be in operation in Maṣlāwi Arabic. As will be discussed in later sections, levelling can be caused by a number of factors such as urbanisation, mobility, internal and transnational migration and war. Similar conditions have been observed in Mosul and a change in its linguistic (more specifically in its phonological) system is hypothesised to be well underway. Recent social upheavals (discussed later in this thesis) have operated in Mosul and its surroundings. These are typified most noticeably by the migratory movements instigated by economic and sociopolitical factors. Bassiouney (2009, p. 123) notes that wars in the Arab region altered the demographic and linguistic composition of cities in several Arab countries such as Jordan (especially of Palestinians immigrants), Iraq and Lebanon. Therefore, more scholarly attention is needed as the consequent linguistic repercussions of those changes in Iraq are all but inevitable. It has been robustly attested that the migration of people has repercussions on the linguistic behaviour of communities given the contact that ensues between them. With increasing evidence that Mosul's local dialect is losing ground to the nation-wide *gelet*, an account addressing this important phenomenon in the speech of Mosul would be revealing.

While the focus of this study is primarily on the speech of Mosul, it will contextualise the current situation of MA to those dialects spoken in surrounding areas. This is to interpret its results and help draw a broader picture of the state of MA and *qeltu*. It will pull various strands together to establish a framework to help understand the current state of *qeltu* dialects in view of the historical development of Iraqi Arabic dialects. In this proposition, this study will provide evidence from its results and the literature to demonstrate that Mosul constitutes one facet of a larger wave of change encompassing other *qeltu*-speaking localities. It will revisit the history of Iraqi Arabic dialect formation to suggest that this wave is a continuation of two antecedent waves of Bedouin-influenced change in Iraqi Arabic. All have led to a broadly similar outcome: the encroachment of *gelet* on *qeltu*.

Another line of contribution expected from this study, it is hoped, is that it will open the door for further research on other *qeltu*-speaking towns such as Hīt, ʿĀna and Tikrit. These localities are also reported to be undergoing change. As will be discussed further in chapter 10, these towns have been experiencing similar sociopolitical conditions to those of Mosul. This study would provide good comparative material to test the claims that the *qeltu* dialects

spoken in those towns are also undergoing change toward *gelet*. Results from further research would provide a broader look at the overall trend this group of dialects is going through.

Chapter Two: Iraq

2.1 Iraq: An introduction

Iraq is a country in the Middle East situated in the eastern side of the Fertile Crescent[7]. Known as the 'cradle of civilisation', Iraq used to be home to many civilisations, including the Sumerian, Akkadian, Babylonian, Assyrian and Abbasid. The earliest recorded historical period in Iraq goes back as far as the Sumerians in the fourth millennium BCE (Berit and Strandskogen, 2015, p. 91).

Iraq used to be the centre of an important intellectual era known as the Islamic Golden Age, which left its legacy on the country's cultural and linguistic composition. This era was inaugurated in the second half of the 8th century with the founding of the House of Wisdom[8] in Baghdad under the reign of the Abbasid caliph Hārūn al-Rašīd (763 - 809 CE). Numerous contributions by scholars linked to the House of Wisdom led to advancements in scholarly fields such as Arabic linguistics. A number of schools of grammar were also established and thrived in the towns of Baṣra and Kūfa (Versteegh, 1993). These schools were pioneered by some notable figures in Arabic grammar such as al-Khalīl ibn Aḥmad al-Farāhīdi who wrote the first dictionary on Arabic as well as the first book on Arabic prosody. His student Sibawayh wrote an important treatise called *al-kitāb* 'the book'. This work is considered the first theoretical contribution to Arabic linguistics (Owens, 1990, p. 8).

Modern-day Iraq has a common border with six countries: Turkey, Syria, Jordan, Saudi Arabia, Kuwait and Iran (Map 1). Iraq's present-day political territory largely corresponds to the ancient land of Mesopotamia straddling the two rivers that define Mesopotamia: the Tigris and Euphrates. Both rivers flow across Iraq before merging to form Šaṭṭ al-ʿarab[9]. The numerous banks and tributaries of these two rivers are known to have formed a highly fertile area known as Lower Mesopotamia, which is the area that once served as home to the aforementioned civilisations. This area extends from the north of Baghdad down to Baṣra in southern Iraq. In addition to this plain, Iraq's terrain can be divided into three further regions. Firstly, a plateau area in the north known as Upper Mesopotamia or al-Jazīra 'the island' (Lindsay, 2005, p. 101) stretching between the Tigris and Euphrates rivers. Secondly, a desert area that extends along the west of the Euphrates from the south of Mosul down to Baṣra. Thirdly, there is the mountainous area in the north and northeast. There are 18 administrative

[7] A crescent-like region in the Middle East known as a moist and fertile area of land in the desert-dominated areas of the Arab region.
[8] The intellectual centre in Baghdad built by Hārūn al-Rašīd.
[9] Šaṭṭ al-ʿarab is a 200 km-long waterway downstream south of the confluence of the Euphrates and the Tigris rivers in the town of al-Qurna in Baṣra in southern Iraq. It empties into the Gulf of Arabia.

provinces in Iraq, of which Baghdad (the capital city), Mosul and Baṣra are the three largest ones.

Map 1: Map of modern-day Iraq.[10]

2.2 Religions and ethnicities

What follows is a brief description of the religious and ethnic structure of Iraq. Iraq is a heterogeneous country stretching over a contiguous geographical territory that is home to a diverse population, the majority of whom are Arabs. Iraqi Arab communities range from Mesopotamians[11] and Marsh Arabs[12] to nomadic Bedouins. Most of Iraqi Arabs are descendants of the Arabs who moved to Iraq after its conquest by Muslims in 637 CE (Fast, 2004, p. 18). Other ethnic groups include Kurds who constitute between 15% and 20% of the country's overall population (CIA, 2016). Kurds can largely be found in the mountainous

[10] Source: commons.wikimedia.org.
[11] Iraqi Chaldean Christians perceive themselves as native descendants of ancient Mesopotamia (Hanna-Fatuhi, 2012).
[12] Also known as *miʿdān*.

north of Iraq. This region is also home to other minorities such as Turkmen, Yezidis, Shabaks, Faylis, Kakai's, Caucasians[13], Persians[14], Mandaeans[15] and Bahai's.

According to 2010 Iraqi government statistics cited in a report by the Home office (The Home Office, 2016), Muslims form 97 per cent of the 32 million people of Iraq. Iraqi Christians account for most of the remaining percentage of the population although accurate estimates are lacking[16]. The roots of Christianity in Iraq go back to the first millennium. Zabad (2017, p. 39) believes that most Iraqi Christians are descendants of Mesopotamian Assyrians. The Christian communities can be found with varying degrees of density across the country, mostly in Nineveh, Baghdad, Kirkuk and Baṣra. The number of Iraqi Christians has dwindled in the wake of conflicts that took place in the northern region and the rest of Iraq in general[17]. Mufti (2004, pp. 42-43) notes that Assyrian Christians in northern Iraq have also been affected by Arabisation[18], which eventually led to them emigrating out of Iraq. It is estimated that around 200,000 Christians fled their areas in Qaraqosh and Berṭilla in the Nineveh plains in August 2014 after the fall of Mosul and the surrounding region (Pichon, 2015, p. 6). Iraq also has a limited number of people of other faiths such as Hindus, Buddhists and Jews. Iraqi Jews used to be found in different areas of the country. The majority of Iraqi Jews left the country in the late 1940s and early 1950s (Bashkin, 2012).

2.3 A linguistic profile of Iraq

Iraq has inherited quite a linguistic mosaic over the course of its eventful history. As will be reviewed below, speakers of the languages and dialects in Iraq have had a considerable interaction throughout the country's history. Sumerian is considered the oldest attested language that has a writing system (Bichakjian, 1991, p. 194). It was succeeded by the Akkadian language of Babylonians and Assyrians. This is believed to be the oldest member of the Semitic phylum (Buccellati, 2013, p. 69). Over the following centuries, other Semitic languages began to emerge such as Canaanite, Phoenician and Aramaic. Aramaic served as

[13] This group includes Dagestanis, Chechens (who can be found in certain villages in Diyala and in al-Ḥawīǧa district in Kirkuk) and Circassians (Jaimoukha, 2005, p. 232).
[14] Most of them live in Karbala and Najaf. For a discussion of this community, see chapter 3 of Yitzhak Nakash's (2003) work.
[15] Mandaeans speak Neo-Mandaic: the modern-day form of Classical Mandaic, which is the liturgical language of the ethnoreligious group of Mandaeans of Iraq and Iran (Häberl, 2011, p. 725).
[16] In this regard, Ufheil-Somers (2013, p. 18) states: "*Church officials now place the Christian population -- all denominations -- at 500,000. Almost two thirds of Iraqi Christians belong to the Chaldean Catholic Church, while most of the remainder are Assyrian, an Orthodox rite. There are also smaller communities of Roman Catholics, Syriac Catholics, Armenians (Apostolic Christians and Catholics) and Protestants*".
[17] For a discussion of this topic, see (Hill, 2018). Also, see 2.3 below.
[18] Arabisation is discussed in 5.5.2.2 and later in chapter 11.

the lingua franca in the Babylonian and Persian empires and was utilised for inscriptions as well as literary and legal uses (McIntosh, 2005).

As will be discussed here and in other parts of this study, Iraq's past and present linguistic composition is fairly diverse. This diversity largely stemmed from processes of (immigration, political changes, language contact and language shift that spanned much of the history of this country. Throughout its history, Iraq had been invaded and ruled by a number of dynasties ranging from the Hittites, Kassites, Persians, Seljuks, Mongols to Tatars and Ottomans (Jessup, 1998, pp. 326-327). Some of the languages spoken by these dynasties contributed to the development of the linguistic landscape of the country. Noteworthy here is the historical intermingling of languages in Mesopotamia. Magidow (2013) discusses this topic and posits that the pre-Islamic linguistic situation of Mesopotamia was a multilingual one with three predominating languages: Aramaic, Persian and Arabic. Magidow (2013, pp. 191-192) highlights the interaction between speakers of these languages and notes that the language of the elite was Persian, the acquiring of which served as a means of getting prestigious roles in the government. Situations of language contact like the abovementioned may account for the traces of influence on Iraqi Arabic from other languages. The lexicon, for instance, shows many borrowings from past and present languages such as Aramaic, Persian, Akkadian, Turkish[19] and English (Muller-Kessler, 2003, p. 642). Where relevant, some of the linguistic influences will be reviewed in this chapter.

In the seventh century CE, the Muslims expanded rapidly into the rest of the Middle East and North Africa. As a result, the Arabic language spread considerably throughout those regions (Owens, 2006, p. 2). As will be discussed further in chapters 5 and 11, the Muslim conquest of Iraq marked an important watershed in the history of the country's linguistic/dialectal composition. Particularly, I will discuss how this conquest shaped the early dialectal situation of Iraq and how relatively parallel effects occurred in later stages of Iraq's history through to the present day.

In 750 CE, the Abbasid Caliphate was founded in Iraq with Baghdad as the capital and Arabic as the language of the Caliphate (Sicker, 2000, p. 29). However, conflicts during and after the rule of the Abbasids resulted in changes in the status of Arabic in Iraq. Suleiman (2006, p. 174) notes that after the Abbasid rule was eventually superseded by non-Arab dynasties, Arabic started to fade in the face of the languages of those dynasties. Persian and Turkish took the place of Arabic as the official language under the new rule of Samanids and Turk Seljuks

[19] For a discussion of the Turkish influence on Arabic (including Iraqi Arabic) lexicon, see (Prochazka, 2005) and (Masliyah, 1996).

respectively. Suleiman (ibid.) also notes that the Mongol conquest of Baghdad affected the prestigious cultural status of Arabic.

As will be discussed further over the next chapters, Iraq continued to attract migrations of tribal Bedouins largely under the Ottoman rule. Ceylan (2011, p. 132) notes that by the 19th century, the Bedouins constituted about half of the entire population of the country and that they underwent a considerable social transformation. Thus, it stands to reason that this must have changed the demographic and, by the same token, the dialectal composition of the country. After the First World War, Iraq was detached from the partitioned Ottoman Sultanate. It eventually gained its independence in 1932 and Arabic was designated as its official language. Under the new constitution enacted in 2005, Kurdish was also designated as an official language in the country.

There are diverse spoken and written languages in present-day Iraq (Map 2 below). Arabic is the majority language that is spoken and understood by the majority of the country's population[20]. The geographic distribution of Arabic extends throughout most of the regions of Iraq. In addition to Arabic, there are several ethnic and religious languages that are mainly found in the north and northeast parts of the country. Kurdish is the largest minority language spoken in Iraq. There are two main dialects of Kurdish spoken in Iraq. The first is Kurmanǧi (or Bādināni), which can be found mainly in northernmost Iraq. The second is Sorāni and this can be found in most of the Iraqi Kurdistan area south of the Great Zab river (Allison, 2007, p. 138). Kurdish is also found in adjacent areas in Mosul, Kirkuk, Ṣalāḥ Ad Din[21] and Diyala provinces. The Shabak community clusters in small villages in the plains of Nineveh province in northern Iraq. Shabaks speak a language that shows influences from the languages extant in the area, i.e. Turkish, Persian, Arabic and Kurdish (Castellino and Cavanaugh, 2013, p. 207). Another minority language spoken in Iraq is that of the Turkmen community. This language has South Azeri and Ottoman traces (Bulut, 2000, p. 161).

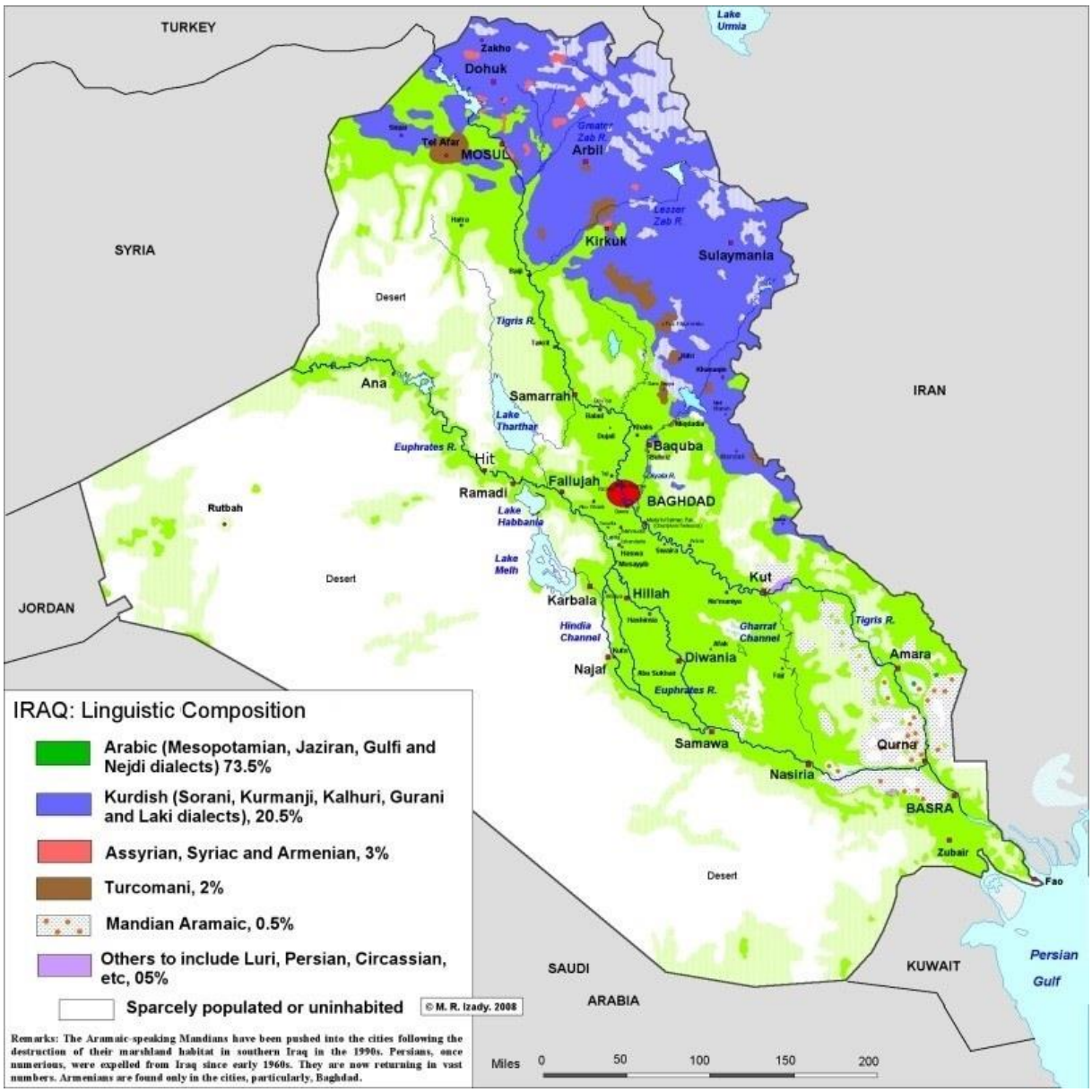
A noteworthy component of the linguistic profile of Iraq are the modern Aramaic dialects. These are known in the literature as the North-Eastern Neo-Aramaic (NENA) and are spoken by most Christian and Jewish communities in northern Iraq. Arnold (2006, p. 370) notes that these dialects are viewed as the surviving traces of the Old and Middle Aramaic dialects that used to be dominant in the area. However, the number of Christians and Jews in the north of

[20] It should be noted that younger generations of Iraqi Kurds speak little Arabic, if any, particularly after 1991 when the medium of instruction in the education system used in Kurdistān region has become only Kurdish (Allison, 2007, p. 143).
[21] Also spelled as Saladin.

Iraq has decreased in the aftermath of some key events[22]. Khan (2007, p. 3) discusses those events and notes that, over the past century, NENA dialects have experienced a great deal of displacement and are now "in immediate danger of extinction" with some of them have already disappeared. Of direct relevance here was the displacement of Christian communities in the area in the late 1970s and early 1980s. The other key event was the emigration of Iraqi Jews in the wake of the creation of the State of Israel in 1948 (ibid., pp. 3-4). With the exception of a few individuals, all Jews left the region and almost all of Iraq in the late 1940s and early 1950s, as mentioned earlier.

Abu Haidar (1991a, p. 1) states that Christians of central and northern Iraq speak either Arabic or their Neo-Aramaic dialect while those of the southern cities mainly speak Arabic[23]. Abu Haidar (ibid.) also refers to an Armenian-speaking community of Christians living in Baghdad and Baṣra[24]. They emigrated to Iraq from Turkey and Caucasus in the early decades of the 20th century.

[22] The Christian community of Baghdad has also dwindled due to the recent events in Iraq. Later places in the thesis will highlight this point.
[23] This statement should be taken with caution as it is likely to expect changes in the mono/bilingualism situation of these communities given the changes that took place in their areas, especially in the north.
[24] It should be noted that they also speak Arabic.



Map 2: Map of languages spoken in Iraq.[25]

Jastrow (2006d, p. 414) contends that, like in other Arab countries, there is a diglossic situation in Iraq. Alongside their Iraqi Arabic dialect, Jastrow posits that most educated Iraqis speak Standard Arabic (SA). Standard Arabic is used in formal domains such as media education while the dialects are used in everyday life settings. Although Standard Arabic is not native to any Arabic-speaking nation, it is valued and accorded prestige and is learned chiefly via formal education in the Arab countries. It is also used in other formal domains such as written and spoken media, public speeches, academic and scientific fields as well as activities of bureaucratic administration.

[25] Source: www. kurdishacademy.org

There are a number of discussions of diglossia in Iraqi Arabic (Altoma, 1969; Altoma, 1957). Altoma's contribution to the discussion largely focused on the effect of diglossia on language education in Iraq. Ferguson's (1959) classic premise of the diglossic situation of language has distinguished two forms of Arabic. These are Standard Arabic being the written form of Arabic and the everyday dialect(s) as the spoken form. This view has been subject to debate in the subsequent literature as it turns out that the situation of Arab societies presents a more complex picture. This is based on the premise that there are different levels and layers observed in Arabic. There have been advancements made on this topic over the years. For example, Badawi (1973) identified multiple levels of Arabic used in Egypt. Researchers have also come to use the term of multiglossia given the multiple levels observed in Arabic. Relevant to this topic has been the identification of what is called 'Educated Spoken Arabic' (ESA) to which Khalil (2012, p. 7) refers as a notable development in the linguistic and sociolinguistic research on Arabic. Researchers (e.g. El-Hassan, 1977; Holes, 2004; Mitchell, 1986; Wilmsen, 2006) agree that this is a composite form of Arabic that combines elements of Standard Arabic and everyday dialects and that it is popular across the Arabic countries.

As will be discussed further in 5.2.4 below, a good deal of research has attempted to assess the relationship between the use of SA and dialectal forms in the Arabic dialects of Iraq and elsewhere in the Arab world. In later sections, I will sketch how this issue has been approached in the literature on Iraqi dialects.

2.3.1 Iraqi Arabic

Iraqi or 'Mesopotamian' Arabic is a continuum of dialects spoken in Mesopotamia, which today corresponds to most of Iraq's territory as well as neighbouring areas in other countries such as Syria, Iran, Kuwait and Turkey. Talay (2011, p. 909) notes that there are some Arabic dialects spoken in Central Asia (particularly in Uzbekistan, Afghanistan and Khorasan[26]) that might be considered as Mesopotamian. He reasons that the origin of these dialects belongs to southern Iraq as they have many features in common with the Mesopotamian group. IA is mainly spoken in Iraq being the native dialect of more than 80% of its population (Peoples and Bailey, 2011, p. 398). Mesopotamian Arabic stretches along a large section of the eastern part of the Arab world and is one of five dialect groups of Arabic. The other four groups are the Arabian Peninsula, Egyptian, Syro-Lebanese and Maġreb (Maġribi) dialect groups (Versteegh, 2001, p. 145).

[26] Khorasan is a province in north eastern Iran.

In the next chapter, I will describe the dialect groups of Mesopotamian Arabic along with the social and geographic distribution of these groups. Before going into that, the next section presents an overview of the literature on Iraqi Arabic.

2.3.2 Overview of the literature on Iraqi Arabic

Although we still lack literature on various aspects of its variation (discussed earlier in chapter 1), Iraqi Arabic has received some good coverage in the literature. There are many accounts largely describing the overall structure of the majority dialect of the capital, i.e. Muslim Baghdadi Arabic (MBA). Blanc (1959) described the dialects of Baghdad listing a considerable number of linguistic examples. This was followed by his important (1964) book in which he accounted for, *inter alia*, the main features of Iraqi Arabic. There are also many other accounts in the form of articles and book chapters (e.g. Abu Haidar, 1987, 1988a, 1988b, 2006a). There are also a number of grammars and dictionaries (e.g. Abu Haidar, 1991a; Bergman and Dickinson, 2005; Clarity, 2003; Erwin, 1963; Karakoshi, 1967; Khoshaba, 2006; Maamouri, 2013; Malaika, 1963; McCarthy and Raffouli, 1964; Odisho, 2005; Woodhead *et al.*, 1967). These also include 'teach yourself' books (e.g. Al-Khalesi, 2006; Nasrallah and Hassani, 2005; Nitzany and Hamad, 2016). The aforementioned accounts provide us with an account of phonological aspects, including segment inventories, syllable and stress structures as well as phonological processes such as assimilation, sound changes and epenthesis. There are also a number of studies on IA that deal with lexical aspects of language use (e.g. Abu Haidar, 1992; Altoma, 1969; Bakir, 1986). Noteworthy contributions are the works of Bruce Ingham (Ingham, 1973, 1976) in which he identified further subgroups of *gelet* (see 3.1.1.1 below).

The literature also includes a small number of studies on IA that can be considered variationist (e.g. Abu Haidar, 1989; Abu Haidar, 1992). The focus of these studies is on how speakers of IA dialects such as Christian Baghdadi Arabic (CBA) and MBA approximate SA. For example, Abu Haidar (1989) has found that women produce a higher rate of standard features of lexical variables in MBA than men. A similar finding has also been reported by Bakir (1986) in his study on Baṣra. Also noteworthy in this line of research is Abu Haidar's (1992) study in which she found a consistent levelling in the use of traditional features of CBA and MBA, particularly in the direction of SA. Her findings for the variables (k) and (q) showed that the variants [k] and [q] respectively were found to be used at the expense of affricated and voiced velar plosive realisations (i.e. [tʃ] and [ɡ])[27], particularly by her young

[27] Further discussion of these two features with examples will come in 3.1.1.3 and chapter 8 respectively.

informants. She reasons that these traditional features have become stigmatised for being an index of rurality and concludes that the dialect is thus approaching SA. After this overview of studies on Iraqi Arabic, the next section reviews its phonology.

2.3.3 An outline of the phonology of IA

As will be discussed in chapter 3, Iraqi Arabic is a broad term that subsumes a continuum of dialects with a vast range of phonological variation. Most descriptions of Iraqi Arabic tend to draw on a certain dialect when accounting for Iraqi Arabic phonology. There are a number of existing descriptions (e.g. Al-Khalesi, 2006; Altoma and Dil, 1966; Erwin, 1963, 1969; Woodhead *et al.*, 1967) that surveyed the sounds of IA taking the dialect of Baghdad (particularly 'educated' or urban speakers of MBA) as a representative dialect of Iraqi Arabic. Some authors (e.g. Al-Ani, 1970; Rahim, 1980) adopted this dialect in their descriptions reasoning that it is understood by most Iraqis.

In her description of Baghdadi Arabic, Abu Haidar (2006a, p. 222) notes that the dialect of Muslim Baghdadis serves as the lingua franca among Iraqis who also use it in their interaction with non-Iraqis. Abu Haidar (ibid.) points out that it is also used in the commercial, educational and media domains. As will be discussed in section 5.3 on levelling in Iraq, previous research has shown that this dialect is one towards which speakers of other dialects (notably CBA) converge as it has grown in prestige and dominance.

With the above in mind, the account presented here is based on the type of Iraqi Arabic spoken in Baghdad, particularly that of urban *gelet* speakers[28]. The next few subsections will survey the existing literature to describe the phonological system of IA based on this dialect[29]. Before going into these subsections, some caveats are in order here. The description below should in no way be taken as exhaustive nor it is intended as an in-depth discussion of the phonological system (and articulatory processes therein) that would possibly take us far from the focus of this study. Where applicable, suggested reading will be given for a thorough discussion of phonological variability and other related aspects of Iraqi Arabic. It should also be noted that most of the descriptions cited here use different types of conventions and/or lack sufficient detail on the phonetic differences in the sounds they describe. It should also be noted that the descriptions and transcriptions provided in this chapter and chapters 3 and 4, especially those taken from the cited works, are the closest in terms of IPA conventions to how the authors of those works notated them. Therefore, they represent the way they were

[28] This is different from that of the residents of Baghdad who hail from southern Iraq and speak a rather southern type of *gelet*.

[29] Accordingly, the use of (IA) abbreviation will be synonymous to this dialect in the description here.

described in those works in terms of transcription and structural description, regardless of whether I agree or disagree with the authors' description.

Consonants

Like most other Arabic dialects, IA has a phonological system that differs from that of SA[30] in the number as well as the quality of consonants and vowels. As will be discussed below, this difference is largely ascribed to the mixing between dialects and loans from other languages. This latter point is highlighted by Talay (2011, 912) who notes that although the consonantal inventory of Iraqi Arabic is "conservative", it has inherited new phonemes from Kurdish, Persian, Turkish and English as well as some lexemes as a result of sound changes in particular areas.

As will be reviewed below, the literature on Iraqi Arabic reveals that there is no consensus on the phonemic status of sounds in the phonological system of Iraqi Arabic. [g] is described as one of several forms of /q/ that exist in IA. However, it appears that [g] is not always a variant of /q/, but rather a phoneme in IA with a number of authors subscribing to this view. A number of authors such as Erwin (1963), Al-Khalesi (2006), Hassan (1981) and Rahim (1980) list it as a separate phoneme in their description of IA phonemic inventory. Rahim (1980, p. 240) takes, for example, the pair [ʕəgid] 'narrow street' *vs.* [ʕəqid] 'contract (n.)' as a basis for this viewpoint. A look at Palva's (2009) account, one can also find some minimal pairs such as [qarrab] 'he caused to come near' *vs.* [garrab] 'he got close' and [farraq] 'he divided' *vs.* [farrag] 'he distributed'. Thus, the above may serve as reasonable grounds for a phoneme /g/.

Bellem (2008, p. 22) notes that there has been a debate on the phonemic status of emphatic realisations of consonants. Blanc (1964, p. 18) provides contrasting examples as regards the phonemic status of /zˤ, fˤ, bˤ/[31], as in the following examples:

[dʒazz]	'he sheared'	*vs.*	[dʒazˤzˤ]	'it creaked'
[fakk][32]	'jaw'	*vs.*	[fˤakk]	'he opened'
[baːba]	'his door'	*vs.*	[bˤaːbˤa]	'father'

The phonemic status of the emphatic realisation of /l/ has also been discussed by a number of authors. While Jastrow (2006d, p. 416) argues that its status is 'marginal'[33], Ferguson (1956,

[30] Transliterations rather than IPA transcriptions will be used for Standard Arabic forms as being comparative forms to, rather than an input for, the dialectal forms mentioned in this study.
[31] Blanc also mentions that the phonemic contrast between /m/ and /mˤ/ is subject to debate.
[32] Blanc also mentions the affricated form of this, i.e. [fatʃtʃ].
[33] Jastrow notes that this applies to many dialects of Iraq.

p. 446) argues that this should be considered as a phoneme rather than an allophone of /l/ identifying three environments for its occurrence. These are: "i) in certain forms of the word for God, ii) in the neighbourhood of other emphatic consonants and iii) in other unpredictable items, sometimes loanwords, sometimes inherited Arabic vocabulary". Ferguson (1956, p. 449) provides some contrasts in Iraqi Arabic such as [xaːli] 'empty' *vs.* [xaːlʸi] 'my uncle' to substantiate this view. Bellem (2008, p. 233) explains that [lʸ] can be ascribed to a historical presence of *a*-quality. She exemplifies this in the word [gilʸa][34] 'he fried', which is derived from the Old Arabic (OA) word of *qalā*. In this example, the final /aː/ was shortened while the backness of lateral /l/ can be explained by the presence of *a*-quality[35].

The view from the literature also reveals that the affrication of /k/ as [tʃ] does not always appear to be allophonic. Blanc (1964, p. 25) notes that the split between the affricated and non-affricated forms of /k/ results into two separate phonemes, as can be instanced in [baːtʃər] 'tomorrow' *vs.* [baːkər] 'a virgin'. Hassan (1981), Rahim (1980) and Bellem (2008) also subscribe to this view. Bellem (2008, pp. 189-190) further explains this feature and notes that it occurs primarily in palatal contexts. A number of accounts (e.g. Abu Haidar, 2006a; Bellem, 2008; Jastrow, 2006d) also refer to some words of Turkish and Persian origin, in which the affricated form does not appear to be a reflex of Old Arabic *k*. Jastrow (2006d, p. 416) exemplifies this in [tʃoːl] 'desert' and [tʃaːj] 'tea'. Therefore, there is sufficient justification to treat it as a phoneme in this dialect.

An area of contention in the phonological system of Iraqi Arabic is the phonemic status of [p] and [v]. These sounds do not exist in SA, but rather come from foreign languages (Talay, 2011, p. 912). The voiceless bilabial stop [p] occurs in a number of loanwords from Turkish, Persian and English. Abu Haidar (2006a, p. 224) illustrates this in words such as [pulak] 'sequins' and [pantʃar] 'puncture'. Some authors (e.g. Abu Haidar, 2006a; Blanc, 1964; Jastrow, 2006d; Rahim, 1980; Talay, 2011) list it as a separate phoneme in their descriptions. Rahim (1980, p. 228) cites minimal pairs such as [sˁoːpə] 'heater' *vs.* [sˁoːbə][36] 'his side/direction' to support such a claim. However, it should be noted that IA speakers, most evidently monolinguals[37], tend to have only a voiced bilabial stop as in [sˁoːba] 'heater'. They may only distinguish between such pairs through the context of the sentence. Therefore, the phonemic status of this sound remains contentious, see Table 1 below.

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34 Bellem also mentions the form [galʸlʸa]. This word can actually be contrasted with [galla] 'he told him'.
35 Bellem's study, particularly chapter 6 of it, discusses in more detail the emphasis related issues in Muslim Baghdadi Arabic with comparative data from other Arabic dialects.
36 As can be seen in the examples, Rahim transcribes the final /a/ vowel in these examples as [ə] rather than [a] or [ɛ], which are the common variants in MBA. This will be discussed later in this chapter.
37 Although bi/multilingual speakers tend to have /p/, I also sometimes hear them alternate it with a /b/.

Talay (2011) lists the voiced labio-dental [v] as a phoneme. Abu Haidar (2006a, p. 224) notes that [v] can only[38] be found in code-switching words such as [vəlla] 'villa' and [viːsa][39] 'visa'. However, Abu Haidar (ibid.) cites an example where [v] does not occur, as in [talfəzjoːn] 'television'.

[38] She does not list it as a phoneme.
[39] Most *gelet* speakers pronounce it as [viːza]. Old speakers normally pronounce it as [fiːza].

	Plosive	Fricative	Affricate	Liquid	Nasal	Approximant
Bilabial	(p) b bˤ				m (mˤ)	w
Labiodental		f fˤ (v)[40]				
Dental	t d			l lˠ		
Interdental		θ ð				
Alveolar		s z zˤ	dʒ tʃ	r	n	
Postalveolar		ʃ				
Emphatics	tˤ ðˤ	sˤ				
Palatal						j
Velar	k g	ɣ				
Uvular	q	x				
Pharyngeal		ħ ʕ				
Glottal	ʔ	h				

Table 1: List of the consonants of IA.

[40] The parenthesised sounds, i.e. (p) and (v) are used largely in loanwords and are often replaced by /b/ and /f/ respectively, as reviewed. The case of (mˤ) is also subject to debate, as discussed earlier. Therefore, including them as phonemes is tentative.

Vowels

As will be reviewed below, the dialect is marked by a richer vocalic system than the triangular system of SA (i.e. /a/, /u/ and /i/). Talay (2011, p. 913) notes that the vocalic inventory of Iraqi Arabic consists of vowels inherited from Old Arabic as well as vowels from historical sound shifts. As is the case with consonants, there is no consensus among researchers in their account of the number, quality and transcription of IA vowels (see Table 2 below). Erwin (1963) and Al-Khalesi (2006) report four short vowels and five long ones in IA. Erwin and Al-Khalesi state that each of these vowels shows more than one variant depending on the neighbouring consonants and their position in the word although neither of them provide phonetic transcriptions of the examples they cite. Other studies (e.g. Al-Ani and May, 1973; Ghalib, 1984; Jastrow, 2006d; Odisho, 2005; Talay, 2011) report that the vowel system of IA consists of eight vowels: three of them are short (/i/, /a/, /u/) while the other five are long (/iː/, /aː/, /uː/, /eː/, /oː/). Authors (e.g. Abu Haidar, 2006a; Blanc, 1964; Erwin, 1963; Talay, 2011) agree that /eː/ and /oː/ resulted from a historical monophthongisation of OA diphthongs *ay* and *aw* respectively.

Erwin,1963 & Khalesi, 2006	Ghalib, 1984; Odisho, 2005; Jastrow, 2006d; Talay, 2011
Short Vowels	Short Vowels
/i u a o/	/i u a /
Long Vowels	Long Vowels
/iː aː uː eː oː/	/iː aː uː eː oː/

Table 2: An outline of IA vowels reported in the literature.

As will be reviewed below, the short vowels of IA show differences in quality and structural distribution. Blanc (1964, p. 30) notes that the vowel system of Iraqi Arabic can be grouped into two subsystems: short and long vowels. Below is a breakdown of the vowels reported in IA.

Short Vowels

1- /i/

A number of authors such as Hassan (1981), Al-Khalesi (2006) and Erwin (1963) describe this sound as a front unrounded vowel. Erwin (1963, p. 17) refers to some differences in the quality of this vowel citing words from English to illustrate such differences. Abu Haidar

(2006a, p. 224) notes that this vowel occurs in unstressed open syllables in word-final positions, as in [wardi] ‘pink’ and [sarsari] ‘layabout’.

The literature (e.g. Blanc, 1964, pp. 31-32; Erwin, 1963, p. 18) also mentions a mid-central variant [ə][41] of this vowel. Blanc (1964, p. 31) provides examples of this variant[42] such as [liːgəddaːm] ‘in advance’.

2- /u/

Erwin (1963, p. 19) notes that this vowel is high back rounded and that it shows three variants[43]. Erwin (ibid.) illustrates this vowel with examples such as [sˁubuħ] ‘morning’ and [tˁubar] ‘meat cleaver’.

3- /a/

The literature refers to more than one quality of this vowel. Blanc (1964, p. 32) notes that this vowel is realised as [ɛ] in absolute final position even if preceded by an emphatic consonant as in [ħuntˁɛ] ‘wheat’. Blanc (ibid.) also refers to a low central quality[44] of this vowel when it is preceded by /ħ/ or /ʕ/ as in [saːʕa] ‘hour’. Abu Haidar (2006a, p. 224) notes that this vowel can occur in all positions. She provides some examples such as [angas] ‘worse’ and [darbuːna] ‘alley’.

The distribution of these short vowels is governed by contextual environments. These environments, discussed by Blanc (1964), Bellem (2008) and Talay (2011), can be categorised into three environments: colour-preserving, *ə*-colouring and *u*-colouring.

a) Colour-preserving is the environment in which OA *u* is realised as [u] while *i* (and some cases of *a*) are realised as [ə]. This occurs when the vowel adjoins a velar consonant on one side and a non-back, non-emphatic, non-labial consonant on the other. This environment can be illustrated in the following examples:

OA	***Gelet***	**Gloss**
ya’kul	[jaːkul]	‘he eats’
rukba	[rukba]	‘knee’
rakibat	[rəkbat]	‘she rode’

[41] Blanc (1964, p. 30) notates it as [e] although he admits that [ə] would have been better. Abu Haidar (2006a, p. 224) lists [ə] as a phoneme /ə/ although with no further note on why this is so.
[42] Blanc (ibid.) also notes that it is difficult to find minimal pairs between /ə/ and /i/.
[43] It should be noted here that Erwin does not provide accurate phonetic descriptions, but rather a crude comparison using examples from English to highlight the differences to which he refers.
[44] He notates it as [a]. In fact, this realisation is true of Baghdadis and is one of the features by which other speakers of *gelet* (like myself) can recognise them.

b) *u*-colouring: is the environment in which OA *i, u* and in some cases *a* become [u]. This occurs when the vowel is neighboured by a velar or an emphatic consonant on one side and a labial on the other. This can be illustrated in the following examples:

OA	***Gelet***	**Gloss**
ḥāmiḍ	[ħaːmuðˁ]	‘sour’
wāqif	[waːguf]	‘standing (m. sg.)’
baṣal	[busˁal]	‘onion’

Blanc (1964, p. 37) also notes that an [r] may come instead of a velar or emphatic consonant. In this context, an alternation between [u] and [ə] occurs after [aː], as in [ʃaːrub] *vs.* [ʃaːrəb][45] ‘drinking’. However, if [r] is flanked by [a], then only [u] is expected, as in [mətɣarrub] ‘having gone abroad’.

c) The third environment is the *ə*-colouring in which the flanking consonants are not those of the colour-preserving and *u*-colouring environments discussed above, as in the following examples:

OA	***Gelet***	**Gloss**
bustān	[bəstaːn]	‘garden’
raǧul	[radʒəl]	‘husband’
ṯulṯ	[θələθ]	‘third’

4- /o/

Erwin (1963, p. 20) and Abu Haidar (2006a, p. 224) list [o] as a separate vowel that occurs in loanwords. Abu Haidar (2006a, p. 224) illustrates this vowel with examples such as [paːltˁo] ‘overcoat’ and [raːdjo] ‘radio’. It should be noted that this vowel is likely a shortened version of /oː/, particularly since there are no minimal pairs with the same short version of the vowel, whether in IA lexicon or loanwords.

Long Vowels

Below is a brief overview of the long vowels described in the literature.

1- /iː/

[45] It should be noted that this actually is not a common form used by urban *gelet*-speaking Baghdadis. I hear it in the speech of Bedouin/rural *gelet* speakers. Furthermore, [ʃaːrəb] is another form of the word ‘moustache’.

Erwin (1963, pp. 21-22) describes this vowel as front unrounded with some quality difference[46] when it occurs next to an emphatic, particularly when the emphatic is in final position. This vowel can be found in open or closed syllables (Abu Haidar, 2006a, p. 224). Erwin (1963, p. 22) illustrates this vowel in words such as [tˁiːn] 'clay' and [dʒariːda] 'newspaper'.

2- /aː/

Blanc (1964, p. 34) notes that this vowel is often realised as back near front consonants while Erwin (1963, p. 23) describes this vowel as low central[47]. Like other long vowels, this vowel can occur in open and closed syllables. Erwin (ibid.) provides some examples of this vowel such as [baːb] 'door' and [ʃaːf] 'he saw'.

3- /uː/

Erwin (1963, pp. 24-25) describes this vowel as back rounded with a difference in quality when it comes next to an emphatic compared to a plain sound[48]. He (ibid.) illustrates this vowel with examples such as [muː] 'not' and [tˁuːl] 'length'.

4- /eː/

A number of authors (e.g. Abu Haidar, 2006a; Bellem, 2008; Fischer and Jastrow, 1980; Jastrow, 2006d; Talay, 2011) refer to this vowel as an outcome of a historical monophthongisation of OA diphthong *ay*. Abu Haidar (2006a, p. 224) illustrates[49] this vowel in the following example:

OA	***Gelet***	**Gloss**
ğaybi	[dʒeːbi]	'my pocket'

This monophthong may also be realised as a diphthong. Blanc (1964, p. 34) notes that this production may sometimes result in either a rising or a falling diphthongal quality. Bellem (2008, p. 130) explains this feature and notes that this monophthong is palatalised into [ie][50] and that it does not occur after emphatic, pharyngeal and uvular consonants. She gives some examples such as the following:

/zeːn/ → [zien] 'good'

[46] He refers to a glide quality although he does not provide a phonetic example of this.
[47] Erwin refers to two variants of this vowel. However, he does not provide phonetic transcriptions of these variants, but rather raw examples from English to illustrate the differences.
[48] As is the case for other vowels, he uses examples from English to illustrate this difference.
[49] Abu Haidar provides only the *gelet* form of this example. I provide the OA one here to illustrate the historical shift in question. The same applies to the vowel /oː/ below.
[50] Palatalisation in Baghdadi Arabic is discussed in chapter 6 of Bellem's thesis (Bellem, 2008).

/beːt/ → [biet] ‘house’

The realisation of /eː/ as [ie] serves as one of the features that differentiate Mesopotamian from Arabian dialects, which lack this feature (Ingham, 1982, pp. 79-80).

5- /oː/

Jastrow (2006d, p. 416) notes that this vowel resulted from a historical monophthongisation of OA diphthong *aw*. Abu Haidar (2006a, p. 224) gives some examples of this vowel such as the following:

OA	***Gelet***	**Gloss**
lawz	[loːz]	‘almonds’
rawba	[roːba]	‘yoghurt’

Abu Haidar (ibid.) notes that OA diphthongs *ay* and *aw* can be found in certain loanwords such as [rawðˁa] ‘kindergarten’, [ħajwaːn] ‘animal’[51] and personal names such as [xawla].

Syllable and stress structure

Erwin (1969, p. 28) notes that the number of syllables in a word in Iraqi Arabic corresponds to the number of vowels therein. Thus, words such as [ˈdaːr] ‘house’ and [ˈkul] ‘all’ have one syllable. Abu Haidar (2006a, p. 225) and Hassan (1981, p. 17) list the following possible syllable patterns in *gelet*:

1. CV [la] ‘not’
2. CV̄[52] [loː] ‘if’
3. CVC [fatħa] ‘hole’
4. CV̄C [baːb] ‘door’
5. CVCC [ħabb] ‘watermelon seeds’
6. CCV̄ [ʃmaː] ‘whatever’
7. CCV̄C [ktaːb] ‘a book’

Hassan (1981, p. 17) also lists the following patterns:

8. CCVCC [ʃbint] ‘dill’[53]

[51] Abu Haidar also notes that old speakers of *gelet* have monophthongal forms of *ay* in this word, i.e. [ħeːwaːn] and [ħiːwaːn]. However, it should be noted that the diphthongal form of this word is often used in a derogatory sense to describe/insult an individual while the monophthongal forms are mainly used to refer to a non-human creature.

[52] Hassan notates long vowels as (VV).

[53] These patterns should be taken with caution as word-initial or final clusters are epenthesised in Iraqi Arabic.

9. CV̄CC [maːrr] ‘passer by’

In most dialects of Arabic, word stress is attracted to heavy syllables, particularly ones with long vowels or ending in a non-word-final consonant. A number of accounts (e.g. Abu Haidar, 2006a; Erwin, 1963; Jastrow, 2006d) provide an overview on stress patterns in Iraqi Arabic. In a nutshell, stress may lie on one of the last three syllables of a word, particularly on the syllable containing a long vowel as in [mariːðˤ] ‘sick’. It may also lie on the syllable with a short vowel followed by a two-consonant cluster or a geminate consonant near the end of the word as in [barˈhanna] ‘we proved’. If the word does not have a long vowel, stress would then be on the penultimate syllable in two-syllable words, e.g. [ˈsˤalla] ‘he performed his prayers’ and on the antepenultimate in all other types of words as in [ˈmadrasa] ‘school’ (Erwin, 1963, p. 40). After this presentation of Iraqi Arabic and its phonological system, I turn now to the dialect distributions in the next chapter to present an overview of the dialects that exist in Iraq.

Chapter Three: Dialect landscape of Iraq

As seen earlier, Iraq subsumes different ethnic and religious groups with a corresponding difference in dialects. Researchers approached this linguistic diversity with more than one classificatory designation. Generally, different criteria are often used in the literature to classify the dialects of a language. For instance, one of these classifications is based on geography whereby dialects of a language are plotted over a geographically defined territory with an isogloss marking the boundary between dialects. Another common criterion is to classify dialects according to certain features in their linguistic system (e.g. phonological, lexical and morphological). These features can serve as a benchmark upon which a dialect is differentiated from and/or linked with one another. In the next section, I will review the main dialectal classifications adopted in the literature on IA.

3.1 *Qeltu* and *gelet* dichotomy

This classification is considered the first major and widely adopted classification of Iraqi Arabic dialects. It has continued in use in the literature on Arabic dialects spoken in the Mesopotamian area. Blanc (1964) constructed a linguistic classification that distinguishes between three Arabic dialects corresponding to the three socioreligious communities that exist in Baghdad: Christians, Jews and Muslims. Blanc found that these communities have their own distinctive dialects even though they live in the same city. The dialects of Christians and Jews have many linguistic similarities between them and can thus be put into a single group while Muslims of Baghdad speak a rather different dialect. Blanc found that a broad dialect dichotomy can be constructed and applied to the rest of Mesopotamia. Therefore, he charted the dialects of Mesopotamian Arabic into two broad dialect groups: *qeltu* and *gelet*.

Both of the umbrella terms (*qeltu* and *gelet*) employed for this designation are derived from the different realisation of the word 'I said' by the speakers of these two dialects. Particularly, they are based on the difference in the realisation of two distinctive features that can define both groups. The first one is the realisation of /q/ as a uvular stop [q] in *qeltu* compared to a voiced velar [g] in *gelet.* The second is the use of SA's suffix stem[54] (*-tu*) as against the equivalent (*-it*) in the *gelet* group.

While this bipartite division in Baghdad is religiously defined, it exists on a sociogeographical basis across Mesopotamia in addition to the religious one. Geographically, the *gelet-qeltu* classification roughly corresponds to two main areas of Mesopotamia: Upper Mesopotamia

[54] Following Holes' (2004) categorisation of Arabic verbal system, i.e. suffix-stem (s-stem) and prefix stem (p-stem).

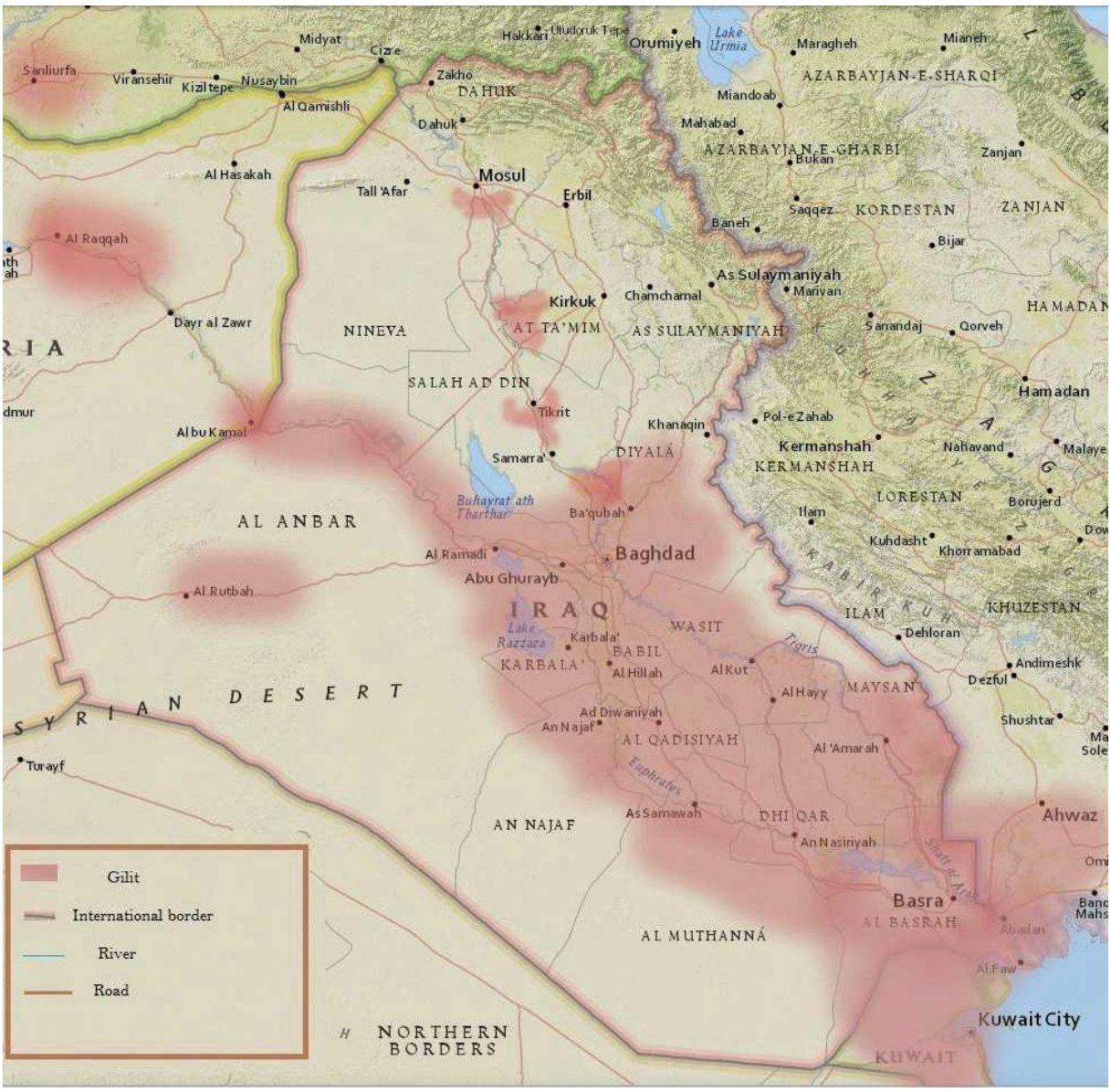
and Lower Mesopotamia (see sections 3.1.1 and 3.1.2 below on *gelet* and *qeltu* respectively). There seems to be no conspicuous physical feature that demarcates these two dialect groups geographically (Yaseen, 2015c). However, Blanc (1964, p. 181) suggests an isogloss that can be drawn between these two areas. This roughly runs between the Euphrates and Tigris, particularly between the north of the town of Fallūğah[55] and the town of Sāmarra. Holes (2007, pp. 125-126) also notes that this isogloss corresponds to a "north-south" dialectal divide. The next sections will deal with these dialect groups individually.

3.1.1 Gelet

The first component of Blanc's binary classification is the *gelet* group. This is principally spoken by Muslims (sedentary and non-sedentary) of Lower Mesopotamia and by the non-sedentary populations[56] in the rest of Mesopotamia (Blanc, 1964). Lower Mesopotamia (see Map 3) stretches from the town of Sāmarra (125 km or 78 mi to the north of Baghdad) along the alluvial plain down to the city of Baṣra. *Gelet* extends along the Tigris-Euphrates system beyond Iraq's political territory. Westwards, it is spoken by the Bedouins of the Syrian Desert (Talay, 2011, p. 911). It also reaches Aḥwāz[57] in the southwest of Iran. In his studies on the Arabic dialects spoken by Arab Aḥwāzi people, Ingham (1973, 2007) highlights the historical and linguistic similarities between the speech of Aḥwāzi Arabs and Iraqi Arabs along the other side of Šaṭṭ al-ʿarab.

Gelet is believed to have developed out of waves of Bedouin immigration in the early Islamic era (Blanc, 1964). As will be discussed in more detail later, the *gelet* dialect solidified its position in Iraq after the exodus of Bedouin population into the central and southern parts of Iraq following the fall of the Abbasid Caliphate. A subsequent process of sedentarisation of the Bedouin immigrants led to the development of a koineised *gelet*.

[55] Also spelled as 'Falluja' in the literature.
[56] This particular distribution needs to be taken with caution as some big changes in the state of affairs have taken place in IA dialects. More sedentary people in the *qeltu*-speaking areas are now adopting *gelet*. This will be discussed in chapter 11.
[57] Or Khūzestān, the Persian version of the Arabic word 'Aḥwāz'.



Map 3: Map of Lower Mesopotamia.[58]

3.1.1.1 Outline of gelet dialects

More than one designation has been used to classify the *gelet* dialects. Ingham (1997, pp. 13-14) classified *gelet* dialects into Southern *gelet* and Central Mesopotamia with the latter group includes the capital Baghdad as well as other nearby towns such as Ḥilla, Karbala and Musayyab. Talay (2011, p. 911) outlines a more detailed classification of the *gelet* dialects (Table 3) that divides them into three branches: Northern Mesopotamian, central Iraqi and Southern Iraqi and Khūzestān. The Northern group includes the dialects spoken by the Bedouin/rural[59] people. Talay (ibid.) notes that a state of affairs similar to that of sedentarised

[58] This map was created using National Geographic MapMaker Interactive http://mapmaker.nationalgeographic.org/.

[59] The literature on Iraqi Arabic usually treats the terms Bedouin/Bedouinised/rural somewhat interchangeably although the designations used to be differentiated in other societies. In this study, no such difference is going to be made given that the rural populations descend from Bedouins who have undergone a process of sedentarisation over the last few centuries.

Bedouins in Iraq may be found in the dialects of Bedouins in Syria since mostly the same tribes reside on either side of the border between the two countries. The Central Iraqi group includes the dialects of the people living in and around Baghdad. The third group comprises both urban and rural people of the southern towns in Iraq and Aḥwāz or Khūzestān in Iran. Ingham (1976, p. 76) divides this latter group into four subgroups: (i) Šaṭṭ al-ʿarab and lower Kārūn[60], (ii) ʿAmāra and the marshlands, (iii) the Euphrates, (iv) Zubayr and parts of the Fāw. Ingham (1976, p. 80) notes that the group of Zubayr and the Fāw is rather different from the other three. This is because it is akin to the neighbouring Kuwaiti Arabic, a view that other scholars such as Al-Ḥanafī (1964) and Johnston (1967) also share. Blanc (1964, p. 6) notes the dialect of Kuwait is "closely related with" *gelet* citing affrication, among others, as one of the features that can be found in both.

The Semitic Languages and Dialects IV: Languages of the Arabian Peninsula	
B) *Gelet* Dialects	
I.	Northern Mesopotamian group
	1. Syrian šāwi dialects (including cities like Urfa[61] and al-Raqqah)[62]
	2. Rural dialects of northern and central Iraq.
II.	Central Iraqi Group
	1. Muslim Baghdadi
	2. The sunni area around Baghdad
III.	Southern Iraqi and Khūzestāni group
	1. Urban dialects (*ḥaḍar*)
	2. Rural dialects (*ʿarab*)[63]
	3. Marshland dialects

Table 3: An outline of gelet dialects, adopted from (Talay, 2011).

3.1.1.2 Overview of the literature on gelet

As has been reviewed in chapter 1, there is a scarcity of research on Iraqi Arabic. This has been highlighted by a number of scholars of Arabic linguistics (e.g. Jastrow, 2006d; Palva, 1983; Talay, 2011). Before Blanc's (1964) study, there was little known about the linguistic situation in Iraq although some attempts appeared before that. A few studies appeared in the early 20th century (e.g. Cantineau, 1937; Fleisch, 1957; Meissner, 1901). Another work is Van Wagoner's (1949) work on MBA with some examples from Baṣrāwi informants. Blanc's (1964) study provided a springboard for many subsequent studies (e.g. Abu Haidar, 1987, 1988a, 1988b, 1989, 1991b, 1992, 2006a; Jastrow, 2006d; Palva, 2009) on Iraqi dialects,

[60] A river that runs through the province of Khūzestān before it empties into Šaṭṭ al-ʿarab.
[61] This is a city in south-eastern Turkey near the border with Syria. It is also officially known as Šanlıurfa.
[62] See Figure 4.
[63] See 3.2 below for a distinction between these two terms (i.e. *ḥaḍar* and *ʿarab*).

particularly *gelet*. Some of Abu Haidar's works offer a thorough linguistic investigation and description of MBA. Of note is her (1992) article in which she tried to track changes in CBA and MBA, notably in the direction of SA.

There is also a study by Palva (2009) in which he examines the historical interaction between *qeltu* and *gelet* dialects that gave rise to the modern-day MBA. In this study, Palva (2009, p. 18) reasons that researchers start from this tripartite distinction of communal dialects in Baghdad as there appears to be no previous documentation before the twentieth century.

The focus of most of the studies sketched above has been on the formation as well as the distribution of *gelet* in Baghdad. However, apart from a few studies sketched below, the other *gelet*-type dialects have been less investigated. For instance, the dialect of Baṣra has so far been approached in some works in the form of unpublished dissertations such as (Mahdi, 1985) and (Al-Siraih, 2013) and also a paper by Bakir (1986). Van Wagoner (1949) reviews a limited number of variants of the dialect of Baṣra with their equivalents in MBA. Daffar (2006) assesses the production of four phonological variables in the dialect spoken in the town of Abu al-Khaṣīb in Baṣra. He found that his literate informants, especially those in contact with the urban centre of Baṣra, adopt the prestigious urban features such as the urban [q] variant of /q/ at the expense of the local [g]. There is also a more recent account by Ibrahim (2012) in which he accounts for the segmental phonology of the Zubayri dialect, a dialect spoken in the west of Baṣra.

Other studies on *gelet* dialects include Meissner (1901) as well as Denz (1971) study on the dialect of Kwēriš, in the district of Musayyab, Babylon. Another study is Salonen's (1980) on Širqāṭ, a district in the province of Ṣalāḥ Ad Din. Several *gelet*-speaking areas around Baghdad (e.g. Ramādi, Baʿqūba, Kūt and Sāmarra) have still not received enough, if any, linguistic investigation. We have some descriptions by Ingham (e.g. 1976, 1982, 1986, 1997, 2007, 2009) on the dialects of the north-eastern parts of the Arabian Peninsula and the adjacent *gelet* areas of southern Iraq and Iran. Cantineau (1937) surveyed some linguistic traits of some Bedouin tribes whose lineages extend to the neighbouring Iraqi regions.

3.1.1.3 Key features of gelet

The features described herein are not intended as an exhaustive list of the linguistic features in *gelet*. Rather, they are intended to give an idea of the main phonological features of this

dialect that are often employed in the literature[64] to describe the dialect and differentiate it from other dialects of Iraqi Arabic.

Affrication

Unlike the *qeltu* group, the consonantal inventory of *gelet* is characterised by affrication: the realisation of the voiceless velar plosive /k/ as a voiceless palatoalveolar affricate [tʃ]. Affrication is an established phonological feature that can be found in both old and modern-day Bedouin-type dialects of Arabic. The first recorded account of this feature can be traced to early pioneering linguists such as Abu Bishr Sibawayh (757 - 796 CE) and Ibn Jinnī (932 - 1002 CE) who termed it in Arabic as *kaškaša*.

In Arabic, the 2nd person personal pronouns (*-ki*) 'your (f. sg.)' and (*-ka*) 'your (m. sg.)' are suffixed to nouns to denote possession. They are also suffixed to verbs and prepositions to function as object pronouns (Ryding, 2005, p. 301). In *gelet*, /k/ is affricated in the 2nd person pronouns[65] to serve as a masculine *vs.* feminine marker (Versteegh, 2001, p. 157) as can be instanced in [beːtak] 'your house (m. sg.)' *vs.* [beːtitʃ] 'your house (f. sg.)'. /k/ is also affricated in the contiguity of front vowels as in /kaːn/ → [tʃaːn] 'was' (ibid.). However, it should be noted that affricated forms can occur next to other vowels as in /fkuːk/ → [ftʃuːtʃ] 'jaws'.

The realisation of /q/

The realisation of /q/ as [g] is another distinguishing feature of *gelet* (see chapter 8 for a fuller treatment of this variable). The [g] *vs.* [q] alternation has been a major criterion in distinguishing between *gelet* and *qeltu* and, on a broader scale, between Bedouin and sedentary dialects. /g/ is characteristically Bedouin and is now an established feature in *gelet*. However, Palva (2009) lists a number of positions where [q] can also be found in this dialect. These positions can be summarised as follows:

a) Some lexical borrowings from SA, as in the following examples:

/qallad/ 'he copied/imitated'

/qarrar/ 'he decided'

/raːqab/ 'he watched/observed'

/tˤabbaq/ 'he applied'

[64] These and other *gelet* features are outlined and discussed in a number of studies (e.g. Bellem, 2008; Blanc, 1964; Erwin, 1963, 1969; Jastrow, 2006d; Palva, 2009).

[65] Versteegh notates them as *–(a)k* and *–(i)č* for masculine and feminine respectively.

b) Some words that belong to the everyday dialect, as in the following examples:

/qubaðˤ/ ‘he received’

/qibal/ ‘he agreed’

c) There are also some *q—g*[66] pairs, as in the following examples:

/jifruq/ ‘he differs’ *vs.* /jifrug/ ‘he unties’

/qisam/ ‘he swore’ *vs.* /gisam/ ‘he divided’

Merger of /ðˤ/ and /dˤ/

In *gelet*, /ðˤ/ and /dˤ/ are merged into /ðˤ/ while in *qeltu*, particularly CBA, this merger does not exist (Blanc, 1964). I can illustrate this feature in the following examples: [ðˤaːʕ] ‘he got lost’ and [ðˤaruf] ‘envelope’.

3.1.2 Qeltu

The other component of Blanc’s binary classification of Iraqi Arabic is the *qeltu* group. *Qeltu*, or North Mesopotamian, is spoken primarily in Upper Mesopotamia[67] (Map 4). *Qeltu* dialects are older than their *gelet* counterparts in Iraq (Owens, 2005, p. 280). The *qeltu*-speaking area covers a contiguous territory extending over three countries. In Iraq, it extends from Nineveh province down the Tigris to the town of Sāmarra and westwards through the Euphrates to the towns of ʿĀna and Hīt. In Syria, it can be found in the area known as Upper Khābūr, which includes towns such as al-Raqqah, al-Ḥasakah and Qāmišli. *Qeltu* also extends further up to south-eastern Turkey, particularly in the provinces of Mardin, Šanlıurfa and parts of Diyarbakir province. Blanc (1964, p. 10) notes that *qeltu* does not show a clear-cut socioreligious demarcation in northern Iraq compared to the case in, e.g. Baghdad. Blanc reasons that this is because it is spoken by all religious groups (i.e. Muslims, Christians and Jews) outside Baghdad with some differences that, however, do not lead to a communal differentiation as in Baghdad.

[66] Palva’s notation.
[67] Also known as North Mesopotamia.

Map 4: Map of Upper Mesopotamia.[68]

3.1.2.1 Outline of qeltu dialects

Jastrow (2006d) provides a ternary classification of the *qeltu* dialect group in which three subgroups can be identified: Tigris, Euphrates and Anatolian. The Tigris group comprises dialects such as Jewish Baghdadi Arabic (JBA) and Christian Baghdadi Arabic (CBA) as well as the dialects spoken by Muslims of the area between Sāmarra up to the city of Mosul. It also includes the dialects spoken by Christian and Jewish communities in the whole *qeltu*-speaking area. The Euphrates group stretches, as the name denotes, along the Euphrates towns in Syria (e.g. Dayr al-Zawr) and Iraq (e.g. ʿĀna [ʕaːna] and Hīt [hiːt]).

The Anatolian group comprises dialects of Daragözü, Diyarbakir, Siirt and Mardin in Turkey. Some of the Arabic dialects spoken in Anatolia (e.g. in Hasköy, Diyarbakir) are now dialect enclaves within the otherwise predominantly Kurdish-speaking areas (Talay, 2011, p. 909). Jastrow (2006d) refers to another branch of this group: the Kurdistān branch (Table 4). This includes the dialects of Jews living in some towns in Iraqi Kurdistān such as Erbil,ʿAqra and Šoš. These dialects share more affinity with the *qeltu* dialects spoken in Turkey than those Jewish Arabic dialects spoken in Mosul, Kirkuk and Baghdad (Jastrow, 1990a).

[68] This map was created using National Geographic MapMaker Interactive *http://mapmaker.nationalgeographic.org/.*

a)	*Qeltu* dialects
I.	Anatolian group
1.	Mardin dialects: Mardin town, Mardin villages and plain of Mardin, Kosa and Mḥallami, Āzex (Bulut), Nusaybin and Cizre (Jews)
2.	Siirt dialects: Siirt town and Siirt villages
3.	Diyarbakir dialects: Diyarbakır town (Christians, Jews), Diyarbakir villages (Christians), Siverek, Çermik and Urfa (Jews)
4.	Kozluk-Sason-Mus dialects: Kozluk, Sason, Muš (Hasköy)
II.	Tigris group
1.	Mosul and surrounding villages (Bəḥzāni, Baʿšīqa, ʿAyn Səfne)
2.	Tikrit and surroundings
3.	Baghdad and southern Iraq (Jews and Christians only)
III.	Euphrates group
1.	Khawetna (Syria, Iraq, Turkey)
2.	Dayr al-Zawr
3.	ʿĀna (Iraq) and Abu Kamāl (Syria)
4.	Hīt (Iraq)
IV.	Kurdistān group (Jews only)
1.	Northern Kurdistān: Səndōṛ, 'Aqra, Erbil, Šoš
2.	Southern Kurdistān: Kirkuk, Tuz Khurmātu, Khānaqīn

Table 4: Classification of Mesopotamian dialects (Jastrow, 2006d; Ingham, 2006). Adopted from (Talay, 2011).

3.1.2.2 Overview of the literature on qeltu

The earliest known treatise on *qeltu* is that by Socin (1882) in which he compared the *qeltu* dialect of Mosul in northern Iraq with that in Mardin in southern Turkey. Owens (2005, p. 279) notes that *qeltu* has received a good scholarly attention and is one of the well-documented dialect groups. There are a number of noteworthy contributions by Jastrow (e.g. 1969, 1973, 1978a, 1983, 1991, 2003, 2004, 2005, 2006a, 2006b, 2006c, 2006d). These works present dialectological descriptions of some *qeltu* dialects spoken in the whole dialect area, including Iraq (e.g. Mosul, Erbil and Tikrit).

There are also a number of studies on the Anatolian group, which spans several *qeltu*-type towns and cities in Turkey. Jastrow's contribution in this area includes studies on *qeltu* dialects such as Daragözü (1973); Kinderib (2003, 2005, 2006c) and Āzex (1969). There is also another work on Āzex by Wittrich (2001). Arnold (1998) presents an account of the Arabic dialect of the Jews of Iskenderun, a harbour town in the Turkish province of Hatay.

The Tigris group has also received some good attention in the literature. The dialects of the Jews have been a central focus of this literature. Jastrow's works include the Jewish, Christian and Muslim dialects spoken in Mosul (e.g. Jastrow, 1978a, 1979, 1989) and the Jewish dialects of Erbil and ʿAqra in northern Iraq (1990a, 1990b). We also have some works on JBA

by Schramm (1954) and Mansour (1991). The latter account by Mansour presents a description of JBA in the form of three updated editions of his book that was published in the 1970s.

There are also some works on the Christian dialects of *qeltu*. Abu Haidar (1991a, p. 3) points out that accounts of Christian dialects were initially confined to two studies that appeared at the beginning of the twentieth century. The first recorded study was done by Gabriel Oussani in 1901 (Oussani, 1901) while the second study was done by Ghanima (Ghanima, 1906). From the point of view of linguistic investigation and description, this dialect has been the focus of some of Abu Haidar's works (e.g. 1987, 1988a, 1990, 1991b, 2006a). A notable work is her (1991a) work in which she gives a linguistic description of CBA. This volume is also one of the few works that have accounted for the levelling of CBA in the face of the dominant MBA. Another noteworthy study by Abu Haidar is her (1992) article in which she accounts for changes taking place in CBA and MBA, notably in the direction of SA.

3.1.2.3 Key features of qeltu

As has been reviewed in 3.1.2.1 above, *qeltu* is a group of dialects stretching over a large expanse of territory and shows a good range of phonological variation. The list below is intended to give some idea of the phonological features that distinguish this dialect group from the *gelet* group. Therefore, this overview is not intended as a comprehensive list of the features describing this dialect group. Further discussion on the features can be found in the sources cited herein as well as in later chapters of this thesis where the relevant variables are explored.

Realisation of /q/

Qeltu is hallmarked by having [q] while *gelet* has a number of variants, as will be discussed in chapter 8. Blanc (1964, p. 27) notes that [q] can be found in all *qeltu*-speaking areas although ʿĀna has some instances of [g]. To illustrate this feature, *qeltu* speakers have, e.g. [qaʕad] 'he sat' and [qaːm] 'he stood' rather than [gaʕad] and [gaːm] as in *gelet*. This feature will be further explored in Maṣlāwi Arabic in chapter 8.

Realisation of /r/

Another characteristic feature of the *qeltu* group is the realisation of /r/ as uvular [ʁ] rather than the apical variant of *gelet*. Jastrow (2006d, p. 416) notes that this feature can be found in the Tigris and Southern Kurdistān groups of *qeltu*. Chapter 7 of this thesis will deal with this feature in Maṣlāwi Arabic.

Lowering of /uː/ and /iː/

In *qeltu* dialects, /uː/ and /iː/ are lowered to [oː] and [eː] respectively in the contiguity of guttural consonants as in *xuyūṭ* [xəjoːtˤ] 'threads' and *daqīq* [daqeːq] 'flour' (Jastrow, 2006d, p. 417). This feature has not been reported in *gelet*. Chapter 9 will further explore the case of /uː/ and its distribution in Maṣlāwi Arabic.

Imāla

One of the prominent features in the phonology of *qeltu* Arabic dialects is the so-called *imāla*: the raising of /aː/ vowel to [eː] in medial positions (Jastrow, 1978b, pp. 26-28). According to Sibawayh, *imāla* can also occur in short /a/ although the frequency of *imāla* in this context is limited (Owens, 2006, p. 197). Levin (1998, p. 175) notes that *imāla* falls into two types. The first type is called medium (or *mutawassiṭa*) *imāla* (i.e. /aː/ → [eː]). This type occurs in the contiguity of an [i] in an adjacent syllable in medial positions (Owens, 2006, p. 197). Blanc (1964, p. 42) provides some examples such as the following:

Gelet	***Qeltu***	**Gloss**
[tʃlaːb]	[kleːb]	'dogs'
[ħwaːdʒəb]	[ħaweːdʒəb][69]	'eyebrows'

Levin (1998, p. 175) also notes that the second type, known as strong (or *šadīda*) *imāla*, occurs in word-final positions where /a/ is realised as [i]. This type can be illustrated by some examples from Blanc (1964, p. 44). Compare:

Gelet	***Qeltu***	**Gloss**
[ʃəta]	[ʃəti]	'winter'
[ħənna]	[ħənni]	'henna'

Realisation of /l/

In *gelet*, a velarised variant of /l/ (i.e. [lˠ]) occurs notably in roots that are preceded by /x/, /ɣ/, or /q/ (Blanc, 1964, p. 20). Erwin (1963, p. 16) notes that it can also occur next to another emphatic or preceding an emphatic but separated by a short vowel. It can also occur after one of the following sounds: [g], [x], or [ɣ]. It can also occur following a labial that is preceded by [g], [x], [ɣ], [r] or an emphatic (ibid.). *Qeltu* dialects have clear [l] in these positions. Some examples[70] illustrating this feature run as follows:

[69] Blanc notates these *imala* realisations for CBA. I noticed similar realisations in MA in my data. Blanc also notates these examples with [iː] in JBA, e.g. [kliːb].
[70] Erwin provides only the *gelet* examples. I provide the *qeltu* equivalents for comparison.

Gelet	***Qeltu***	**Gloss**
[ʃuɣulˠ]	[ʃəɣəl]	‘work’
[xaːlˠ]	[xaːl]	‘uncle’
[lˠatˤiːf]	[latˤiːf]	‘nice, pleasant’
[tˤabulˠ]	[tˤabəl]	‘drum’

Absence of affrication of /k/

As has been described in 3.1.1.3, affrication of /k/ is a characteristic of *gelet* while this feature does not exist in *qeltu*. This can be compared in, e.g. [kaff] ‘palm (body part)’ and [samak] ‘fish’ as against [tʃaff] and [səmatʃ] in *gelet* respectively.

The absence of low vowel raising rule

Gelet shows a low vowel raising rule in which /a/ occurring in a stressed open syllable and followed by /a/ in the next syllable is realised —with some exceptions—as [ə] or [u] depending on the consonant environment (as described earlier) (Blanc, 1964, p. 40). Blanc gives a number of *gelet* examples that I can compare with their equivalents in *qeltu*, which does not have this feature. These examples run as follows:

OA	***Qeltu***	***Gelet***	**Gloss**
samak	[samak]	[səmatʃ]	‘fish’
ǧabal	[dʒabal]	[dʒəbal]	‘mountain’
qamar	[qamar]	[ɢumar]	‘moon’
baṣal	[basˤal]	[busˤal]	‘onion’

Despirantisation

Another feature of *qeltu* is despirantisation, albeit not applicable to all dialect groups. This is the realisation of interdentals /θ ð ðˤ/ as stops [t d dˤ] respectively (Blanc, 1964, p. 19). Jastrow (1978a) reported this feature in the speech of Christian communities as well as in the Anatolian group of *qeltu*, particularly in Diyarbakir. Abu Haidar (1991a, pp. 7-8) gives a number of examples from CBA that I can compare with their *gelet* and MA equivalents as follows:

CBA	**MA**	***Gelet***	**Gloss**
[tajjal]	[θajjal]	[θajjal]	‘lawn’
[dahab]	[ðahab]	[ðahab]	‘gold’
[dˤəhəʁ]	[ðˤəhəʁ]	[ðˤuhur]	‘noon’

Preserving word-final cluster

Qeltu speakers also have word-final consonant clusters–CC in some words, whereas these are epenthesised in *gelet* (Versteegh, 2001, p. 157), as in the following examples:

Gelet	***Qeltu***	**Gloss**
[tʃalib]	[kalb]	'dog'
[galʸub]	[qalb]	'heart'

3.2 Ecological classifications

Linguistic variation is often investigated through a set of overlapping factors such as age, level of education, gender, geographic location, social networks, gender and ethnicity. Besides these parameters, other criteria for classifying dialects in Arabic can also be found. For example, the linguistic forms reflecting the movement and relationships of Arab communities as well as the ecological settings in which they live have also been used in this regard (Palva, 2006, p. 604). As such, it has become the norm in the literature to classify Arab societies and, by extension, their dialects according to the ecological factor. In particular, scholars interested in Arabic dialects still employ the categories of Bedouin, rural and urban to study dialects of Arabic. This largely stems from the premise that the history of peoples' movement and settlement in the Arab world underlies these configurations. This classification is based on the presence (or lack thereof) of features indexing these attributes (Miller, 2007, p. 5). For instance, Cadora's (1992) study divides the ecological configurations that are characteristic of the Arab world into the following ecological communities: Bedouin and sedentary (rural and urban), each with its corresponding linguistic system. Cadora argues that the resultant contact of these migratory movements led to the development of the ecologically-based structures we have today. He suggested a linear developmental line of these movements whereby some Bedouin groups settled in rural areas while rural people moved to urban centres. To illustrate this development, Cadora identifies the following stages in the transitions of these ecological structures:

Bedouin -> Bedouin-Rural -> Rural-> Rural-Urban ->Urban

Abu Haidar (2006b, p. 269) notes that the movement of Bedouin tribes to urban areas has been gradual and a process of levelling has taken place in that Bedouin speech forms were abandoned in favour of others from the recipient communities. Abu Haidar (ibid.) also notes that while we have accounts on the movement from Bedouin to sedentary environments, we still lack depth in the research on the reverse process, i.e. shifting from sedentary to Bedouin. As will be discussed later in the current study, these processes have made radical changes in

the demographic and sociolinguistic state of affairs in Iraq. In this connection, Palva (2006, p. 605) notes that because of the major changes that encompassed the history of Arabic-speaking cities, many people living in old urban localities speak a Bedouinised dialect. On the other hand, we may also find many Bedouin-type people speak an urban type of Arabic. Baghdad provides a good example illustrating these historical interactions in which Baghdadi communities have seen the effects of both Bedouinisation and sedentarisation.

With the above discussion in mind, it is often the case in the literature that Iraqi Arabic dialects are broadly grouped into sedentary *vs.* non-sedentary Bedouin dialects. In this respect, researchers have offered a number of other subgroupings of IA dialects. Abu Haidar (1988b, p. 77) subdivides the *gelet* dialect spoken in Baghdad into two main groups using two variants of the same word to encapsulate their background: *xaššˇ* [xaʃʃ] and *ṭabb* [tˁʌbb][71]. The former represents the speech of the urban community while the latter refers to the rural or Bedouin-type people of Baghdad who came to the city from other areas of Iraq.

Also in this category, a similar dichotomy has also been drawn in the dialects of Arabic in southern Iraq and Khūzestān (Ingham, 1997). Ingham distinguishes two main groups: *ḥaḍar* [ħaðˁar] and *ʻarab* [ʕarab] to correspond to the urban *vs.* rural groups respectively. The *ḥaḍari* people are mixed descendants of tribes practicing palm cultivation. These people settled in urban areas and became sedentarised over the generations. The *ʻarab* group refers to the larger tribal groups of Bādiya[72]. This is the rather remote desert-like hinterland where nomadic or semi-nomadic people live and maintain a number of traditional practices such as livestock rearing. Apropos of this distinction, Ingham (ibid.) distinguishes it from that usually struck between towns (as urban) and countryside (as rural) in England.

3.3. Geographical and intra-ethnic classifications

Classifying Iraqi Arabic dialects according to their geographical position is also used the literature although it is less common than the other classifications. There is a distinction based on the major geographical regions in modern Iraq. Samarra'i (2002) and Al-Khalesi (2006) contend that there are three main dialect groups corresponding to three major parts of Iraq: central, northern and southern. This designation often takes the three largest cities of Iraq as representatives of these three main regions. The northern group is represented by Mosul (being the largest city in the northern region) while the southern group is represented by the Baṣra (being the largest city in the southern region). The central group is represented by the capital Baghdad. It should be noted here that while this classification occasionally appears in

[71] Both terms are derived from the realisation of the verb 'to enter'.
[72] Geographically, it starts from the west of the Euphrates down to the heart of Arabia.

the literature, it remains one that is neither precise nor illustrative of the peculiarities suppressed under its cover terms.

As has been discussed earlier, there have been attempts at distinguishing Iraqi Arabic along religious/ethnic lines, as in the example of communal dialects of Baghdad. However, classifying IA dialects along intra-ethnic or intra-religious groups has not been straightforward. Blanc (1964, pp. 9-10) refers to an attempt by Massignon (1912) in which he identified seven dialects of Baghdad, three of which are *sunni* and two others are *šīʿi* although this was not supported by data. Blanc (ibid.) notes that the variation observed in Baghdad cannot be interpreted according to Massignon's sect-based classification as there are no differences between *sunni* and *šīʿi* Baghdadis. Moreover, his informants were unaware of such differences and referred to the *šīʿi* migrants from the south as "provincial".

Assertions in this regard remain contentious given that there is as yet no attempt to establish such a classification. Potential attempts may seek to delve into the settlement history of communities (*sunni* and *šīʿi*) in Baghdad and Iraq, particularly in the south. Such attempts may offer further insights into the dialectal situation of Iraq[73].

In the last two chapters, I have presented an overview of Iraq and its dialects sketching the main dialectal configurations mentioned in the literature. I turn now to the next chapter, which will shed more light on the city of Mosul and its dialect being the prime focus of this study.

[73] A Baghdadi friend (who is *šiʿi* himself) of mine told me that he is perceived as *sunni* by people of southern Iraq because of his accent. The theme of *sunni*/*šīʿi* linguistic differences from a perceptual perspective also seems to be a potential topic to look at in future research that could potentially enhance our knowledge regarding such a distinction.

Chapter Four: Mosul and its dialect in focus

4.1 Introduction

Mosul is the capital city of Nineveh province in the north of Iraq (Map 5). It lies some 274 miles (about 441 km) to the northwest of Baghdad. The city is situated in a hilly —yet fertile and cultivated— area bordered by the mountains from the east and the north and by the large al-Jazīra desert from the south and west. Mosul is the second largest city of Iraq and serves as a major economic centre in the northern part of the country. Mosul has an industry sector based on industries such as cotton, textile, cement and sugar. It is also a major marketplace for agricultural products and is dubbed Iraq's bread-basket given the mass cultivation of wheat in the region. Mosul has also gained its importance from the building of an oil refinery to serve the nearby oilfields and crude oil pipeline. This helped Mosul's metropolitan area to expand and become one of the most urbanised areas in which new residential neighbourhoods, services and government buildings were built. For instance, the University of Mosul was opened in 1967 and is today the second largest university in Iraq. The bulk of urban expansion in Mosul has been on the left side of the Tigris River, which cuts the city into two contrasting parts. The first is Sāḥil al-ayman 'Right Bank', which is the traditional Arabic-Islamic part. Sāḥil al-ayman is locally known as the old city and consists largely of traditional alleys on the western steppe-plateau. The second part is Sāḥil al-aysar 'Left Bank', which is the more modern urban part of the city.

Mosul has a heterogeneous society of different ethnic and religious groups such as Arabs, Kurds, Christians (Assyrians and Armenians), Shabakis, Yezidis and Turkmen. Mosul also used to have a Jewish community the majority of whom left by the 1950s and early 1960s (Gat, 2013). Corresponding to this array of people are a number of languages spoken in the city from Arabic, Neo-Aramaic and Kurdish to Shabaki and Turkmen. Arabs constitute the majority of Mosul's population and can be found throughout the city. The other groups mentioned above largely live in the Right Bank as well as in nearby villages in the plain of Nineveh.

Different etymological proposals were put forward as regards Mosul. It is believed that Mosul was first mentioned by Xenophon as *Mespila* in 401 BCE in his expeditionary chronicles (Rawlinson, 2014, p. 19). In some medieval sources, Mosul is also believed to have etymologically originated from the word *muslin* in reference to the production of textiles in the city. Another etymological explanation is that it refers to 'linking/junction point' or 'meeting place' in Arabic. There are different views as regards the origin of this name. One suggests that it may have stemmed from the city's location at the junction of important trade

routes of the Middle East (Chardin, 1926, p. 162). Luke (1925, p. 24) explains that this is because the city used to be a place where different languages and faiths meet. Al-Ḥamawī (1977, p. 223) refers to a number of suggested explanations for this name and adds that this name may have come from the fact that Mosul used to connect al-Jazīra to the rest of Iraq.

Mosul is known as *umm al-rabīʿayn* (literally means 'the mother of two spring seasons') and this is because spring and autumn are very much alike in the area. It is also referred to as *al-ḥadbā'* (the hunchbacked). It is believed that this name is drawn from the iconic slant minaret of the Great Mosque of al-Nūri[74].

Map 5: The location of Mosul in Iraq.[75]

4.2 A brief overview of Mosul's history

Mosul is a city with several millennia of history and can trace its origin as an old city mentioned in old Biblical references stretching back to around 1280–1260 BCE. It was built by King of Assyria Shalmaneser I on a rich site near the ancient city of al-Nimrud on the

[74] Built by Sultan Nuruddin Zangi in 1172 CE and was destroyed on the 21th of June 2017.
[75] This map was created using National Geographic MapMaker Interactive http://mapmaker.nationalgeographic.org/.

eastern side of the Tigris River. Mosul was made the capital of Assyria by King Ashur-Nasir Pal II (reigned between 884 - 859 BCE) (Ramirez-Faria, 2007, p. 477). After the collapse of the Assyrian dynasty in the 6th century BCE, Mosul maintained its status as a key trading centre.

Mosul has long had a mix of religious and ethnic communities. The formation and settlement of those communities had its long history too. While this topic might generate a long discussion, some brief remarks from the literature are in order here. As mentioned earlier, Mosul used to have a Jewish community. The Jews of Mosul are believed to have descended from the Jews exiled by the Assyrian Kings[76] (Shwartz-Be'eri, 2000, p. 26). Another important community of Mosul is that of Christians. Huebner (2014, p. 522) notes that when the northern region of Mesopotamia fell under the rule of the Sassanid dynasty in 224 CE, many Christians started to settle in Mosul and eventually developed into one of the largest Christian communities in Iraq.

During their conquest of Mesopotamia, the Muslims marched towards the northern parts of it and took Mosul in around 641 CE. Kennedy (2008, p. 137) notes that the present-day city of Mosul may trace its roots as a garrison city built by the Muslim army. The settlement of Muslims in Mosul continued after its conquest by them. Magidow (2013, p. 206) remarks here that the city was settled by the tribe of Azd while Amin (2011, p. 212) notes in this respect that after this conquest, a number of tribes moved to the newly conquered area such as Tamīm, Bakr, Khuzāʿa, Taġlib and Khazrağ. The newly built garrison city of Mosul expanded under the Islamic rule. In this regard, Luke (1925, p. 137) notes that Mosul quickly developed into one of Iraq's major urban centres after Arabs were given land plots to build houses. Moreover, roads, walls and a floating bridge over the Tigris were built, and the city became the capital of al-Jazīra province (Dumper and Stanley, 2007, p. 260).

It should be noted here that there was a key event in the history of Mosul that had a far-reaching effect on the linguistic situation of the city. When Mosul fell to the Mongols in the 13th century, it did not see the resultant destruction and demographic change that Baghdad had seen. Therefore, the *qeltu* spoken in the area survived the effects that the dialect had seen in the lower parts of Iraq, particularly Baghdad (also discussed in 5.6 below).

Mosul remained an important centre under several states (e.g. Kurdish, Arab, Persian and Turkish Seljuk) that ruled Mesopotamia (Huebner, 2014, p. 522). In 1878, the Ottomans

[76] It is believed that this had begun in 597 BCE.

incorporated it as one of the three main administrative divisions of Iraq (*vilayets*[77]), along with Baghdad and Baṣra (Çetinsaya, 2006, p. 15). In the early 20th century, Mosul became the subject of a territorial dispute, known as 'The Mosul Question'. After the conclusion of the First World War and the dissolution of the Ottoman Empire, newly reconstructed Turkey claimed the possession of this oil-rich *vilayet* in the northern part of Iraq. The British forces seized control of Mosul and added it to the British Mandate in 1925 after the signing of an armistice with Turkey. Under the terms of the mandate, Iraq was granted 'Class A' status, which paved the way for quick independence in 1932. Eventually, Mosul remained the provincial capital of Nineveh province, which today consists of eight administrative districts or *qaḍā'*[78].

4.3 A linguistic profile of Mosul

4.3.1 Maṣlāwi Arabic

MA is the Arabic dialect native to the people of the city of Mosul in the north of Iraq. As has been noted earlier in 3.1.2, MA belongs to *qeltu* and is thus believed to be a descendant of the Arabic dialects spoken in Mesopotamia in the pre-Islamic era (Thanoun, 2010).

As has been sketched earlier, the Mosul area has been home to communities of Aramaic-speaking communities (e.g. Christians and Jews). MA is spoken by the Muslims, Christians and Jews of the area with some differences although these are not associated with their religious backgrounds[79] (Blanc, 1964, p. 10). To illustrate the differences with an example[80], Christian Maṣlāwis use the verb modifier (ka-) to form habitual aspectual forms or present continuous tense of verbs. Muslims and Jews often use (qa-) and (ʕa-) equivalents instead. This can be compared in the following example:

Christian Maṣlāwis		**Muslim and Jewish Maṣlāwis**				
/ka	jəʃtəɣəl/	/qa	jəʃtəɣəl/	OR	/ʕa	jəʃtəɣəl/
He is	working	He is	working		He is	working

It is believed that, like other Mesopotamian dialects of Arabic, Maṣlāwi Arabic shows some Aramaic influence and is of an urban rather than a Bedouin origin (Al-Mawṣili, 1935; Blanc, 1964, p. 164). This influence dates back to the time when Aramaic was the dominant

[77] The Ottoman administrative system then was known as *vilayets* and was established in 1864 (Çetinsaya, 2006).
[78] Also spelled *kazā*, particularly in Turkish literature.
[79] Blanc (ibid.) argues that the differences are rather related to other factors such as neighbourhoods within the city, age and level of education.
[80] This feature was mentioned and explained by some of my informants from whom I present the example here. Blanc (1964, p. 115) also notes that it is (qad-) and (qa-) in JBA and CBA respectively. *Gelet* has (da-) as a verb modifier. See (Palva, 2009) for a discussion of this feature in *gelet*.

language in the region before it was superseded by Arabic. This influence is perhaps more evident in the introduction of Aramaic grammatical as well as lexical units into MA (Al-ʿObaydi, 2010). Rajab (2011, p. 69) notes that Maṣlāwi Arabic shows some lexical influence from other languages such as Persian and Turkish. She reasons that words from these languages may have made their way into Maṣlāwi Arabic through a historical interaction during the periods when Mosul was under the Persian and Ottoman rules. More evidence for such an influence comes from Chalabi (1960) who lists many examples of Persian words and also points out that Maṣlāwi Arabic has words of French, Kurdish and Russian origins.

MA-speaking areas can largely be found in the central area of the city, which includes parts on both banks of the city along the catchments of the Tigris. Those on the Right Bank are surrounded by the seven gates of Mosul, Bāb al-ṭōb, Bāb ǧdīd, Bāb lagaš, Bāb al-ǧisir, Bāb ʿaġāq, Bāb al-bēḍ, Bāb Sinǧār[81]. The Right Bank comprises traditional houses and buildings with a network of narrow ravine-lined streets and alleys, locally known as *ʿawjāt*. There are also a number of traditional bazaars such as al-sarāy and al-naǧafi. The Right Bank is home to most of the deeply rooted Maṣlāwi families who exercise handcrafts in traditional craft-based markets such as *ḥaddādīn* (blackmiths), *ṣiffīrīn* (brass workers), *ʿaṭṭārīn* (spice dealers) and *naǧǧārīn* (carpenters). Over the past century, those families have expanded with their siblings and children seeking alternative spacious housing in newly built neighbourhoods in the Left Bank. The Left Bank has now a network of modern suburbs built after the oil boom in the mid-20th century.

4.3.2 Previous treatments on MA

Although there are many studies on the *qeltu* dialect group, MA is still short of adequate studies compared to other *qeltu* dialects as the existing studies on this dialect are few and far between. As shown earlier, in addition to the earliest known account by Socin in 1882, we also have Blanc's (1964) study in which he sampled some informants from Mosul to highlight some aspects of variability. He also delineated the position of MA within the *qeltu* and *gelet* classification he constructed. Another contribution worth mentioning here is Jastrow's (1978a) study, which is a good contribution to the research on this dialect in addition to his other works on Mosul (e.g. 1979, 2004). His (2004) study deals with the Arabic spoken by the Muslims, Christians and Jews of the city. The literature also includes a few other studies such as that by Abu Haidar (2004) in which she reviews phonological features of the *qeltu* dialect spoken in the town of Rabīʿa[82] and compares them to MA. We also have a study by Samarra'i

[81] Also spelled 'Sinjar'.
[82] It lies to the west of Mosul.

(2002) in which he presents some descriptions of the main features in Mosul such as *imāla* and the rhotic realisation[83]. Another study by Al-Bakri (1967) in which he reviews the use of SA features in MA arguing that MA is Iraqi Arabic's closest dialect to SA given the numerous similarities between them. We also have a study by Ismael (1977) in which he describes the phenomenon of *imāla* in the dialect surveying the contexts in which it occurs. There are also two accounts by Thanoun (2010) and Tawfiq (2010) on the realisation of the rhotic variable in Maṣlāwi Arabic. There is also a study by (Salih, 1972) in which he gives a number of observations on the dialect, especially the rhotic variable. This variable, among other variables, is also addressed by Rajab (2011). These studies will be further discussed in chapter 7, which will deal with the rhotic variable in MA.

4.3.3 Phonology of Maṣlāwi Arabic

In what follows, a brief description of the phonology of MA is given. It highlights the main traits that distinguish it from other IA dialects.

4.3.3.1 Consonant inventory

A look at the literature reveals that the consonant inventory of MA is, to a certain degree, akin to that of Christian Baghdadi Arabic (CBA) notwithstanding some differences between the two dialects. One of these differences is the presence of despirantisation (see 1.3.2.3) in CBA, which does not operate in MA. MA differs more markedly from *gelet* dialects in that, for instance, it does not show noticeable *gelet* features such as affrication of /k/. It also lacks the voiced velar plosive [g] as a variant of /q/[84]. Table 5 below lists the inventory of consonants in MA.

[83] These two features will be discussed in chapter 5 and 8 respectively.
[84] Both of these features are described in 3.1.1.3.

	Plosive	Fricative	Affricate	Liquid	Nasal	Approximant
Bilabial	(p) b				m	w
Labiodental		f (v)				
Dental	t d			l		
Interdental		θ ð				
Alveolar		s z	dʒ	(r)[85]	n	
Postalveolar		ʃ				
Emphatics	tˤ	sˤ ðˤ				
Palatal						j
Velar	k	ɣ				
Uvular	q	x ʁ				
Pharyngeal		ħ ʕ				
Glottal	ʔ	h				

Table 5: Inventory of consonants in MA.

[85] The apical form here is a phone of uvular fricative /ʁ/. Chapter 7 sheds more light on this.

4.3.3.2 Vowel Inventory

As sketched earlier, we have a number of accounts[86] in the literature (e.g. Blanc, 1964; Jastrow, 1978a, 1978b; Abu Haidar, 1991a, 2004) on the phonological inventory of *qeltu*. Below is a brief description of the vowels reported in the literature supplemented by some personal observations of mine whenever possible.

Short Vowels

Blanc (1964, p. 37) notes that the short high vowels of *qeltu* dialects (e.g. Mosul, Mardin, ʿĀna, JBA and CBA) are rather similar. Jastrow (2006d, p. 417) notes that /i/ and /u/ have historically coalesced into a single vowel, namely /ə/. Jastrow thus finds that *qeltu* now shows a two-term short vowel system that consists of /ə/ and /a/ as he (ibid., p. 418) illustrates in the following examples:

	Gelet	***Qeltu***	**Gloss**
/u/	[uxut]	[əxət]	'sister'
/i/	[miliħ]	[mələħ]	'salt'
/a/	[ʃahar]	[ʃahaʁ]	'month'

Long Vowels

MA has the following long vowels: /iː/, /aː/ and /uː/. These can be illustrated in the following examples:

/iː/	[ħadiːd]	'iron'
/aː/	[naːm]	'he slept'
/uː/	[tˤuːl]	'height'

In addition to these vowels, MA has two other long vowels that can also be found in *gelet*. Jastrow (2006d, p. 416) notes that OA diphthongs *ay* and *aw*, while preserved in some *qeltu* dialects (e.g. Jewish dialects in the north and the *qeltu* spoken in Tikrit), are monophthongised to /eː/ and /oː/ respectively in the rest of Iraq[87]. The monophthong /eː/ also results from the process of *imāla* (discussed in 3.1.2.3 above).

[86] Some of these offered perspectives on MA.

[87]This indicates that Mosul is included. However, I noticed that diphthongs may appear in Maṣlāwi Arabic in the same contexts that Abu Haidar (2006a, p. 224) observed in Baghdadi Arabic, i.e. i) in words from SA, e.g. [rawðˤaˑ] 'kindergarten' and ii) personal names, e.g. [xawlaˑ] and [majsuːn].

In addition to the historical monophthongisation of OA *aw*, the /oː/ vowel results from the lowering of /uː/ as in /muːsˁil/ → [moːsˁil] ‘Mosul’. Chapter 9 will explore this feature in more detail.

Figure 1 below displays the short and long vowels that exist in MA.

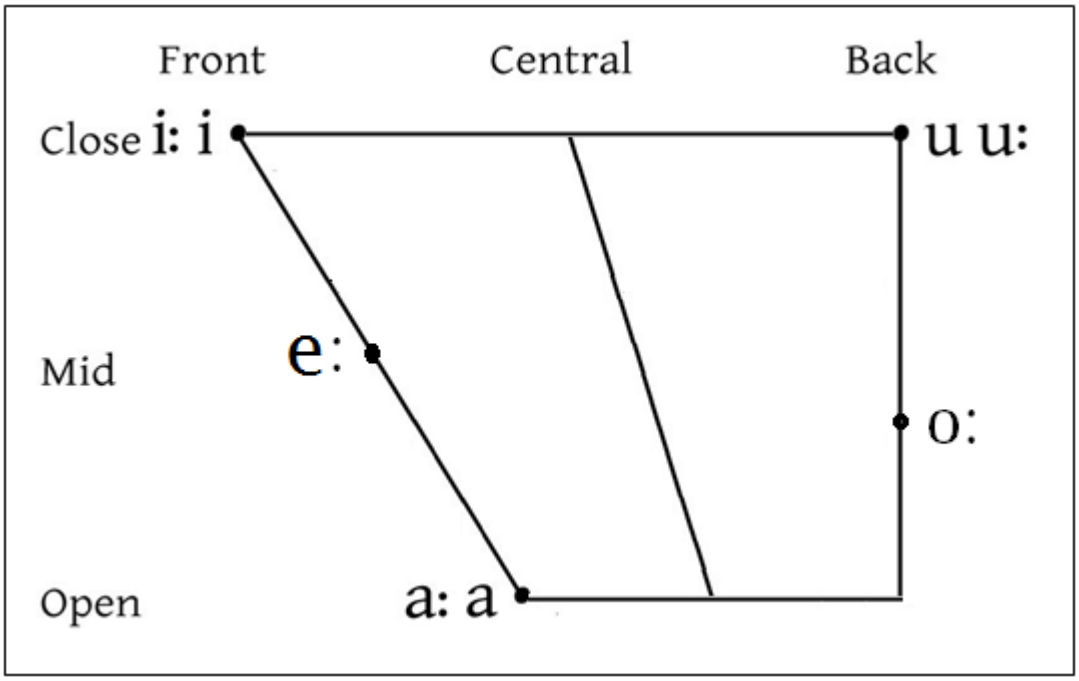


Figure 1: A chart of the short and long vowels of MA.

4.3.4 Key characteristics of Maṣlāwi Arabic

Aside from despirantisation, all the *qeltu* features described in (3.1.2.3) can also be found in Mosul. There are also some features peculiar to Maṣlāwi Arabic. These come from the literature as well as from some observations I found in my data. The description below is intended to be an illustrative rather than exhaustive list of peculiar features of MA.

Imāla

While *imāla* is shared by *qeltu* dialects, MA has some peculiarity in certain cases of this feature. Blanc (1964, p. 47) discusses this feature and points out that Old Arabic *ā* in MA is realised as [iː] in certain words, as can be compared in the following example:

OA	***Qeltu***	**MA**	**Gloss**
basātīn	[baseːtiːn]	[basiːtiːn][88]	‘gardens’

[88] I also heard it in other examples such as *mawā’īn* [mawiːʕiːn] ‘dishes’ and *masāḥīq* [masiːħiːq] ‘cosmetics’.

Blanc (ibid.) also notes that MA[89] has what he called a "productive" type of *imāla* in which /aː/ turns into [eː] when suffixes with /i/ are added to words. Blanc remarks that this behaviour does not exist in the qeltu dialects of CBA and JBA[90], as can be illustrated in the following examples:

Word	**MA**	**Gloss**
bağdādli	[bayɣdeːdli]	'Baghdadi'
bəstānči	[bəsteːntʃi]	'gardener'

Absence of despirantisation

As described earlier in (3.1.2.3), while *qeltu* dialects (e.g. CBA) show despirantisation of interdentals /θ/, /ð/ and /ðˤ/ as stops [t], [d] and [dˤ] respectively, MA does not have this feature.

Realisation of /s/

This is a feature I found in my data that needs to be noted here. MA speakers realise /s/ as [sˤ] in certain words such as /ʕaruːs/ → [ʕaʁoːsˤ] 'bride' and /faras/ → [faʁasˤ] 'horse'. To the best of my knowledge, this feature has not been mentioned elsewhere. With lack of research on this feature, it should be admitted that considering it as a peculiarity of MA or otherwise remains tentative.

Vocalisation of /r/

Blanc (1964, p. 22) refers to vocalisation of /r/ in CBA and JBA. However, he refers to a peculiarity in MA[91] in this feature, particularly in the following examples:

CBA	**MA**	***Gelet***	**Gloss**
[arbʕaː]	[oːbʕaː]	[arbəʕaː]	'Wednesday'
[arbaʕa]	[oːbaʕa]	[arbaʕa]	'four'

[89] Blanc notes that it also exists in some Anatolian dialects although he provides examples for MA only.
[90] Blanc does not provide comparative data for CBA or JBA. However, I found in Abu Haidar's (1991a) work on CBA that these two examples are realised as [bəɣdaːdi] and [bəstaːntʃi] on pp. 67 and 185 respectively. This confirms Blanc's statement on the absence of this type of *imāla* in CBA.
[91] Chapter 7 will further investigate this feature in Maṣlāwi Arabic.

Chapter Five: Key concepts

5.1 Variation and change

Variation is a fundamental characteristic of any human language; the variationist tradition of linguistics takes this as its core principle. Aspects of variability can be observed within individual speakers of a dialect as well as across the wider scope of whole communities (Weinreich *et al.*, 1968). Language variation and change is a key research tradition in today's sociolinguistics that seeks to quantitatively capture variability in language structure governed by external and internal factors. The former refer to non-linguistic factors that influence the linguistic behaviour of individuals and communities while the latter refer to the structural units pertaining to linguistic systems.

Sociolinguistics works on the premise that language variation has a social significance and operates in an ordered rather than a random way (Labov, 1972a; Weinreich *et al.*, 1968). It seeks to explore the complex relationships that exist between factors impacting the speech behaviour of societies. Examples of the relationships between factors will be provided throughout the course of this study.

Early research of Labov and his colleagues in the 1960s is acknowledged for the departure from old dialectological methods used in elucidating inter-speaker and intra-speaker variability and change of phonological systems. This departure has been facilitated by quantitative methods that employ statistical techniques to determine the effect that a set of linguistic and extra-linguistic factors might have on the use of linguistic forms (Foulkes and Docherty, 1999b)[92]. Following Labov and his colleagues' early research, the literature on variation and change has expanded as an extensive number of like-minded researchers have followed this tradition (e.g. Guy, 1975; Miller *et al.*, 2007; Poplack, 1980; Sankoff, 1980; Wolfram, 1969). Kerswill (2003, p. 225) notes that interest in the field of socially informed dialectology in British English dialects goes back to Trudgill's classic studies of his hometown, Norwich (1972, 1974). This research has been followed by studies on other urban localities across Britain, e.g. Glasgow (Macaulay, 1976), Edinburgh (Reid, 1978; Romaine, 1978) and Belfast (Milroy, 1980) to name but a few.

The scope of researchers' interests has extended from investigating a single area of study (e.g. a city or a town) to larger geographical settings (e.g. regions). Foulkes and Docherty (2007, p. 53) highlight the theoretical and methodological advancements in this field with a focus on phonology. They note that the realm of phonological variation and change has been

[92] This work by Foulkes and Docherty (2009a), for example, reports a number of changes observed in different localities across the British Isles.

revolutionised in the second half of the previous century in that the focus of variationist research has been refined and expanded to include links with other strands in linguistics (ibid.). In fact, this can be seen in the wealth of studies investigating patterned variability and related phenomena (e.g. Britain, 2001, 2010; Eckert, 2000; Labov, 1962, 1963, 1966, 1994, 2001; Milroy, 1992; Milroy and Milroy, 1978; Trudgill, 1972, 1974, 1988; Watt and Milroy, 1999; Watt, 1998; Watt, 2000). These studies have employed large datasets to determine how language use temporally and spatially changes as determined by external factors such as gender, class, age, style, etc.

This type of research has also been pursued in the Arab world with rather similar lines of interest, albeit to a lesser extent, to those in the Anglophone tradition. As we will see in later sections, the early dialectological and sociolinguistic literature has produced a body of research on variation and change addressing different Arabic dialects. Some of this work (e.g. Abu Haidar, 1991a; Jastrow, 1978a, 1978b) involved charting dialects of Arabic-speaking regions and providing descriptions of its grammatical traits. However, the focus of this research has been towards discerning the linguistic repercussions of the major sociopolitical and socioeconomic changes caused by the oil discovery in the twentieth century. Many Arab countries have seen some key phenomena such as (im)migration, war and urbanisation that changed the settlement patterns and consequently the dialectal situation of those countries. Discussions about these changes in some Arab cities include (Al-Wer, 1991, 2002b, 2007; Miller *et al.*, 2007). Arab societies have emerged as places of linguistic contact and heterogeneity and thus key topics for researchers to pursue. In this light, a burgeoning line of variationist research on Arabic has focused on linguistic variability resulting from such contact. One of the main processes this type of research has called attention to is dialect levelling. The next section will account for this important phenomenon.

5.2 Dialect levelling

This has been one of the widely considered concepts in the variationist research. Dialect levelling is the supplanting of local linguistic forms of a dialect with equivalents of wider regional or national usage. In other words, dialect levelling leads to the gradual abandoning (in some cases, complete eradication) of the traditional linguistic differences that exist between dialects of a language. Watt and Milroy (1999, p. 26) remark that interest in tracking the disappearance of dialect differentiation has its antecedents in the early works of dialectology in Europe. Comparable levelling-related terminology appeared in the works of scholars of German dialectology such as Wrede (1919) who described ‘Mischung’ and ‘Ausgleich’ (i.e. mixing and cross-dialect levelling) as the main dynamics of pronunciation

change (Hinskens, 1993, p. 7). However, Watt and Milroy (1999, p. 26) note that the linguistic literature at that time did not account more fully for the reasons of this phenomenon (discussed in more detail in section 5.2.2 below), which seem to have been felt more in North America than in Europe. In view of the numerous works on its occurrence in different dialects (sketched below), the theme of dialect levelling has become a perennial topic in variationist research. This is perhaps because the social circumstances that facilitate levelling continue to operate in present-day urban settings. As we will see later, this has been evident in many places around the world including Iraq.

It is generally agreed that this process is a linguistic corollary of the disintegration of local communities that have historically maintained its own traditional linguistic norms. A number of factors triggering levelling have been reported in the literature such as, among others, mobility, industrialisation and immigration. With the occurrence of parallel changes such as urbanisation and war in the Arab world, levelling continues to operate not only in Europe but also worldwide. Therefore, levelling remains an active line of research. In the next section, I will give a brief account of the main observed definitions and trends that developed in the research on this phenomenon.

5.2.1 Definitions and trends

Lodge (2004, p. 205) notes that there are several linguistic processes and trends that can be included under the blanket term 'dialect levelling'. The view from the literature on this phenomenon is that a number of definitions have been suggested to account for the phenomenon. However, a generally agreed definition states that levelling[93] is a phenomenon in which traditional forms of a dialect gradually disappear in the face of widely used alternatives. In some cases, new forms might arise and become the norm in the speech of people of a wide geographical area (Trudgill, 1986, p. 98; Williams and Kerswill, 1999a, p. 149).

Hinskens (1993, p. 5) notes that levelling leads to the reduction of linguistic structures that distinguish a dialect from another. On a related note, Britain (2001, p. 1) points out that during the process of levelling, "the number of variants in the output is dramatically reduced from the number in the input". To put it another way, it results in 'simplification' of linguistic systems in which irregularities in those systems are reduced. A consensus that can be gleaned from the literature on levelling is that linguistic features with limited reachability vanish.

[93] Also sometimes termed as 'supralocalisation'.

Highlighting this outcome in more detail, Torgersen and Kerswill (2004, p. 24) contend that dialects converge on each other. Their definition runs as follows:

> The reduction in the number of realisations of linguistic units found in a defined area, usually through the loss of geographically and demographically restricted, or 'marked', variants and the closely related notion of dialect convergence, by which two or more dialects become more alike through convergent changes

In his discussion of this phenomenon in British English, Kerswill (2002b, pp. 187-188) suggested the term 'regional dialect levelling' to refer to the phenomenon operating on a broader geographical scale (i.e. across whole regions). He also suggested that the term 'levelling' pertains to those cases related to local areas being relatively smaller in size. In the lines below, Kerswill (ibid.) justifies these two terms stating:

> There is, thus, a rather awkward terminological ambiguity. Regional dialect levelling is an outcome of various partly geographically-based language change processes. One of these is geographical diffusion. Another, is of course, levelling, in the sense of 'mutual convergence'. I would propose the use of the term regional dialect levelling for the dialect geographical phenomenon and simply levelling (following Trudgill, 1986) for the linguistic changes which are the outcome of accommodation.

To account for the mechanisms that underlie these linguistic changes, Kerswill proposed two of them. The first is geographical diffusion whereby linguistic forms extend from a densely populated source such as an urban centre with economic and cultural importance. Kerswill also highlights that chances are that neighbouring cities and towns will more likely adopt the incoming innovations before they reach rural areas in between. The change promoted by diffusion occurs primarily in the speech of adults who adopt innovative forms sourced from outside their speech community, i.e. exogenous. This type of change is contrasted with a change from below, which originates from below the level of awareness. It represents the system-internal factors and is often led by middle or lower social classes (Labov, 1966). Britain (2001, p. 12) notes that, under the diffusion mechanism, the old forms and the incoming ones come into contact and this would result in the creation of new forms rather than just simply the disappearance of the old ones. He discusses these outcomes in the context of the Fenland dialects[94].

The other mechanism Kerswill proposed is levelling, which is principally an outcome of mutual accommodation that takes place between speakers in contact in individual speech communities or localities such as newly formed towns. This theory of accommodation was

[94] Britain also discusses the process of koineisation in this area (Britain, 1997b).

developed by Giles *et al.* (1973) and Coupland and Giles (1988). It holds that when speakers of different, yet intelligible, dialects come into contact, they tend to linguistically accommodate to their interlocutors by converging on their forms. Trudgill (1986, pp. 1-8) points out that short-term acts of accommodation would turn into long-term ones. The eventual outcome of this behaviour is often the supplanting of local features.

Hinskens (1993) and Auer (1998) contend that dialect levelling results from what they term 'vertical convergence' in which one dialect converges on a standard one. Different views have been put forward about what defines 'standardness'. One of the views suggests that a standard dialect is often viewed in connection with the dialect officially used as the primary medium of instruction in the education system. Milroy (1999, p. 184) illustrates this view in the type of English often associated with Oxbridge universities. Milroy also refers to other cases in which a dialect spoken in a capital city can also be considered standard. An illustration of this case can be seen in London in the 17th century when its dialect was viewed as the standard model, particularly of educated, upper-class Londoners (ibid.). However, it is argued that levelling can be differentiated from standardisation. Foulkes and Docherty (1999a, p. 13) explain this difference and note that when speakers abandon their traditional forms, it needs not to be necessarily in the direction of a standard dialect. Rather, localised variants may be supplanted by other supralocal non-standard equivalents, which may be innovations sourced from a sociogeographical centre. Watt (1998) provides an illustrative example of this view in that the forms his young Newcastle informants produced can be considered 'pan northern' rather than standard southern ones.

5.2.2 General factors promoting levelling

The literature on levelling reports that there are a number of factors that are hypothesised to give rise to this process. These include, among others, increased immigration, human mobility and a demographic shift in a certain area. The sociolinguistic literature has shown that the precipitating factors lead to a dilution and, in some cases, a subsequent elimination of localised dialect forms (e.g. Watt, 2002; Watt and Milroy, 1999; Williams and Kerswill, 1999a). The literature has suggested an array of factors because of which the speech behaviour of people changes over time. These factors are numerous and the extent and applicability of which vary from one case to another. In the next sections, I shall try to flesh out the skeleton presented here going into each factor that recurs frequently in sociolinguistic and dialectological literature in more detail.

5.2.2.1 Immigration

Triggered by a variety of events, immigration is one of the factors that have been observed in many parts of the world. Dialect change is often viewed as an outcome of contact between people of one community and (im)migrants coming from other areas. In some cases, contact occurs between communities immigrated into a new area such as a newly built town (Trudgill, 1986).

Not only does this immigration-triggered change lead to homogenising linguistic structures, it may also, in extreme cases, lead to a complete eradication of a particular dialect. Lodge (2004, p. 31) notes that the number of immigrants plays a role here in that if it is low compared to that of the locals of the host area, immigrants would gradually converge towards the dialect of the recipient community. Not only that but also the native dialect of immigrants, in the long run, disappears leaving no mark on the dialect of their hosts. Conversely, there are other outcomes in which numerically larger immigrant groups overshadow speakers of the local dialects. Lodge (ibid.) points out that, under this scenario, a process of mutual levelling takes place that results in koineisation (discussed further below). The resultant dialect of this koineisation process is a mix of linguistic features from the dialects of interacting communities (Kerswill, 2002b).

5.2.2.2 Mobility

Another common reason often reported for the occurrence of levelling is the increasing mobility, which has characterised modern societies. Mobility is afforded by the availability of modern transportation networks, which have effectively facilitated commuting between even distant areas. This, in turn, results in more opportunities for people to come in contact with other people while taking their linguistic activities to new territories (Britain, 2001). Many societies, largely in Europe, have been reported to be undergoing the transition from being insular to diverse (Chambers, 2003b; Kerswill, 2001). Discussions of European contexts can be seen in (e.g. Auer, 1998; Auer and Hinskens, 1996; Auer *et al.*, 2005).

5.2.2.3 Urbanisation

As mentioned earlier, the effects of urbanisation and similar phenomena in the Western world such as industrialisation, modernisation and globalisation have been reported to be giving rise to the reduction of dialect diversification (Auer and Hinskens, 1996). In her discussion of the theme of levelling, Meyerhoff (2011, p. 250) notes that during the early decades after the conclusion of the Second World War, new towns were established in several parts of the world such as the United Kingdom, Japan and Scandinavia. This involved expanding and

urbanising areas that were initially smaller localities (e.g. villages). She adds that the linguistic outcome of bringing people into newly built towns in those countries led to bringing a mix of people with their different dialects into contact with each other.

Miller (2004) discusses this phenomenon in the Arab world where many countries have undergone urbanisation in its infrastructure at an accelerating pace, especially over the second half of the previous century. Expansion of existing housing and economic infrastructures has been varyingly noticeable, particularly in the countries with massive oil wealth. Urbanisation has also caused contact between people of different dialects and thus resulted in some varying degrees of linguistic homogenisation. There are a number of cases in Arabic-speaking areas where linguistic changes have been observed in this light. A good example of this is Oman (Holes, 1996), which has been known as an insular country with a tribal-dominated society that has long helped in maintaining the linguistic peculiarities of its Bedouin and urban dialects. This society has seen a change as a result of migration triggered by urbanisation. Examples of urbanisation are many and, in later sections, I will discuss this social change and its linguistic consequences in Iraq.

5.2.2.4 Accommodation

This is one of the main factors that alter the speech patterns of people. In his discussion of the factors that make dialect contact a trajectory of language change, Trudgill (1986) reasons that the phenomenon of linguistic accommodation between speakers is a precursor to a change in their dialects. When people come into contact with each other, it is well established that they may adjust their speech to the speech forms of their interlocutors. This happens in varying reciprocal and or one-sided capacities depending on the conditions of the situation. According to the model of accommodation (Coupland and Giles, 1988), two main processes often surface and result in the adoption or avoidance of certain dialect forms: convergence and divergence. In the former, speakers alter their linguistic use in a way to gain some linguistic harmony with their interlocutors, which leads to the pre-eminence of the majority and/or prestigious linguistic forms. In the latter process, speakers opt to emphasise their dialectal distinction from their interactants. The individual instances of short-term accommodatory behaviour that speakers perform often develop into long-term accommodation (Kerswill, 2003, p. 223; Trugdill, 1986, pp.1-8). As a result, a number of levelling and koineisation processes develop in this situation and linguistic variants may be abandoned and/or acquired. See for example (Britain, 1997b; Kerswill, 2001, 2003, 2013; Milroy, 1980; Torgersen and Kerswill, 2004; Williams and Kerswill, 1999a) for a further discussion and examples of these outcomes in the UK.

5.2.2.5 Language policy

Language policy has also been cited as a reason for the occurrence of levelling of dialectal differentiation. In some societies, there is some form of language policy implemented to alter language use in the form of protection, promotion (or otherwise) of certain languages or dialects (Wright, 2007). There are many cases where this factor has been in operation such as China and Singapore. In Europe, we also have an example in Norway investigated in a study by Hilton (2010) in which she assesses regional dialect levelling in the Hønefoss dialect of Norway. She discusses the issue of what is termed 'Status Planning': the deliberate official interference of governments to determine specific functions that should be assigned or recognised for a dialect of a particular community. Levelling in Taiwan Mandarin is also an example of language policy (Hsu and Tse, 2009). Language policy effects have also been observed in the Arab world. Bassiouney dedicates a whole chapter of her (2009) book discussing this issue alongside a number of relevant concepts and fields in the Arab world.

5.2.3 An overview of the previous literature on levelling

We can find a wealth of studies on the concept of dialect levelling that have often been carried out on the different English dialects in North America and Britain. Scholars who addressed the phenomenon of levelling in Britain have published a series of studies (e.g. Altendorf, 2003; Britain, 2002, 2010; Kerswill, 2001; Trudgill, 1986; Watt and Milroy, 1999). This strand of research has also included other dialects across the world including many European countries such as Norway (e.g. Hilton, 2010; Kerswill, 1996b; Røyneland, 2009); Germany (e.g. Cornelissen, 1999; Twaddell, 1959); Sweden (Brink and Lund, 1975; Kristensen and Thelander, 1984); Denmark (e.g. Brink and Lund, 1975; Kristensen and Thelander, 1984; Kristiansen, 2003; Kristiansen and Jørgensen, 2003; Pedersen, 2003); France (Armstrong, 2001, 2002; Boughton, 2005; Esch, 2002; Hornsby, 2002, 2006, 2009; Lodge, 2004; Pooley, 2009, 2012; Temple, 2001); The Netherlands (Hinskens, 1993); Spain (e.g. Ariztimuño, 2010; Hernández-Campoy and Villena-Ponsoda, 2009; Santazilia, 2009; Unamuno and Aurrekoetxea, 2013); Belgium (Vandekerckhove, 2005); and Slovenia (Lundberg, 2013).

The research also included other Arabic-speaking areas such as Nağdi Arabic (Al-Rojaie, 2013); Moroccan Arabic (Hachimi, 2005); Tunisian Arabic (Gibson, 2002); and Kordofanian Baggara Arabic (Manfredi, 2012). What all these studies have in common is the spread of dominant features, whether socially or geographically, across other areas. This results in dialect variation to become more homogenous and far less localisable. The next section will focus more on the studies we have on levelling in Arabic dialects.

5.2.4 Studies of levelling in Arabic dialects

As mentioned earlier, the research on spoken Arabic has a decent history with pioneering works that go back to al-Farāhīdi and Sibawayh. In the course of the 19th century, a significant number of works appeared. These works ranged in form and interest from dictionaries to more specialised works. However, Behnstedt and Woidich (2014, p. 301) contend that the academic linguistic interest in Arabic dialects did not materialise until the first half of the last century when the scholarly research has evolved from primarily descriptive to more analytical or explanatory aims. Inspired by the advancements of the Western research tradition, more research has followed and various interests including dialect contact and the resultant linguistic repercussions have put this research on a firm footing.

The research addressing levelling in Arab societies has highlighted, more or less, parallel trends and factors to those observed in the Western societies. Researchers have accordingly defined levelling in Arab contexts as the dominance of region-wide dialect forms over localised ones (Holes, 1995, p. 39). This definition is in accordance with the generally agreed one proposed by other researchers (e.g. Kerswill, 2002b; Trudgill, 1986) who addressed the phenomenon in Anglophone dialects. Blanc (1960, p. 62) notes that levelling can be viewed as the influence of standard dialect on different dialects in the Arab world where speakers may discard some forms of their dialect in favour of others from a standard one. Albeit disputed in some respects, this view matches the one popular at the time in Europe. Versteegh (2001) discussed this phenomenon through the lens of koineisation that has led to the creation of early and present-day dialects of Arabic. One of the cases he discussed is the one in Iraq, which I will also further discuss throughout the course of this study.

There are a number of studies assessing levelling of features in Arabic dialects including but not limited to Egypt (De Jong, 1996; Haeri, 1991, 1994; Miller, 2005); Jordan (Abdel-Jawad, 1986; Al-Khatib, 1988; Al-Wer, 1991, 2007); Yemen (Watson and Asiri, 2007); Iraq (Abu Haidar, 1989, 1990, 1991a); Bahrain (Holes, 1980, 1983, 1987); Syria (Daher, 1998b; Jabeur, 1987; Jassem, 1987; Kojak, 1983); Morocco (Hachimi, 2005); Sudan (Manfredi, 2012); and Mecca in Saudi Arabia (Al-Ahdal, 1989; Al-Jehani, 1985). There is also a more recent study by Al-Rojaie (2013) who investigates the levelling of affrication in Qaṣimi Dialect, Saudi Arabia. We also have some studies (e.g. Bassiouney, 2008; Cadora, 1992; Holes, 1995; Miller and Caubet, 2009; Versteegh, 2001) that have approached contact-induced change in Arabic-speaking areas in the light of different considerations such as literacy, koineisation and accommodation. Moreover, given the ecological nature of Arabic dialects, there are some studies (e.g. Al-Wer, 2002a; Horesh, 2014; Jabeur, 1987) on both rural and urban dialects to

investigate the occurrence of levelling out of the contact between the two. The studies sketched above report a retreat of traditional features in the face of supralocal ones that are associated with a major city dialect. To exemplify this, Al-Rojaie (2013) found that his Qaṣimi younger and middle-aged speakers, particularly women, tend to increasingly adopt the supralocal form [k] while avoiding the traditional affricated form [ts].

The concept of diglossia has also been applied in furthering the research on linguistic variability and change in the Arabic-speaking world. As we will see below and later in this study, researchers working on Arabic linguistics have often assumed diglossia to be a motive for speakers of Arabic to alter their dialectal forms. Research on the theme of linguistic change/levelling (e.g. Abdel-Jawad, 1981, 1986; Sallam, 1980) has often been conducted to track how speakers alter their Arabic dialects to approximate SA. Al-Wer (2006, p. 628) remarks that the linguistic features of SA were assumed as prestigious and standard and thus considered by speakers as target forms. She believes that this assumption has posed some problems in terms of analysis and interpretation. Al-Wer (ibid.) also refers to another problem in this regard is that there has been a stereotypical understanding of the concepts of prestige and stigmatisation and thus their role in language variability has not been adequately discerned. A number of studies (e.g. Al-Wer, 1997; Gibson, 2002; Ibrahim, 1986) have argued that the direction of change is not actually towards SA in that it is not a spoken dialect and that speakers actually target a widely used regional dialect codified as prestigious. In the sections below, I will compare these notions to the case in Iraq in which MBA can be seen as a case in point.

5.3 Levelling in Iraq

The occurrence of levelling in Iraq has not been given the attention it deserves as there is relatively little literature on its occurrence in this country. However, there has been evidence that this process is underway in some traditional Iraqi Arabic dialects. Blanc (1964) mentions traces of change in the dialect of Baghdadi religious communities, particularly CBA and JBA. Specifically, he refers to a decline in the use of certain local features such as despirantisation. Similar observations can be found in other studies (e.g. Abu Haidar, 1988b, 1991a, 2006a, 2006b; Al-Ani, 1976b; Holes, 1995) on the speech of Baghdadis in that *qeltu* CBA is getting under the shadow of MBA. In her study on CBA, Abu Haidar (1991a) refers to a decrease in the use of traditional features such as despirantisation. This corroborates Blanc (1964) who also referred to a decrease in the use of similar traditional features in CBA and JBA. Abu

Haidar (1991a, p. 122) notes that there are some features that appear to be now "optional" or "redundant" such as the postpositional copula[95], as in the following example:

/həjji	əlħəlwi/	/həjji	əlħəlwi	ja:ha/
'she is	pretty'	'she is	pretty'	or 'she is pretty indeed'

Therefore, Abu Haidar (1991a, p. 149) believes that this feature and the use of particle *kən*[96] in CBA may eventually vanish. Abu Haidar also refers to *imāla* as another feature that is being levelled. Al-Ani (1976b, pp. 51-52) and Abu Haidar (1991a) attribute these changes to, among others, two key contributory factors. First, the exodus of people from the south into the capital, which changed the traditional structure of Baghdad and its people. This movement of *gelet*-speaking Bedouin-type people, who gradually grew in social and political power, led to the changes observed in CBA. Second, Al-Ani and Abu Haidar also refer to the spread of education in the country that has had its bearing on this change.

5.4 Levelling in Maṣlāwi Arabic

Mosul has been going through social and demographic changes over the past few decades. There has been evidence, albeit tentative, that these changes have had effects on the linguistic situation of the city. The conditions and repercussions observed in Mosul are analogous to those often reported in the process of levelling. Therefore, it is believed that Maṣlāwi Arabic is being levelled in the face of the mainstream *gelet* dialect with which it has been in contact (Yaseen, 2015a). Although we lack studies on levelling in MA, there is a reasonable level of agreement on this phenomenon being afoot in some *qeltu*-speaking cities, notably Mosul. Traditional features of those dialects are believed to be losing ground to supralocal *gelet* alternatives.

I what follows, I present the existing evidence on levelling in Mosul. This evidence, which appeared in three published articles (Yaseen, 2015a, 2015b, 2015c) out of this work, takes the form of commentaries and other references in academia and the press. References to a change in Mosul and *qeltu* dialects in general have been given by researchers such as Palva (1983) and Jastrow (2006d). Palva (1983, p. 101) refers to a considerable change in *qeltu* dialects in Iraq, Syria and Turkey as a result of major changes in these countries. In this regard, he says:

> Due to the radical change in the modern society, local dialects are today exposed to substantial linguistic interference. On the other hand, *qeltu* dialects represent almost everywhere a geographically recessive type. In Iraq and in the Syrian town Dayr al-Zawr they are losing

[95] Blanc (1964, p. 124) describes this feature as "old-fashioned and obsolescent".
[96] She discusses this on p. 147.

> ground to the dominant *gelet* dialects, in Anatolia to Turkish and Kurdish. In many places in Anatolia the socioreligious minorities have already become extinct or have left the area and many dialects will become extinct during the next generation.

A more recent reference to a change in MA comes from Collin (2009). He argues that a change is going on in a number of *qeltu* towns including Mosul suggesting that the isogloss that divides the two dialects groups (i.e. *qeltu* and *gelet*) is moving further northwards. He refers to Abu Haidar (Personal communication, February, 2017) stating the following:

> Tikrit was once a *qeltu*-speaking town. Nowadays, the majority speak *gelet*. Mosul is going that way too. Kirkuk pre-1979 was predominantly Turkoman-speaking. By the time of the invasion in 2003, the Turkomans had become a minority and you could find all kinds of southern and central *gelet* dialects throughout Kirkuk.

There is a gap of over two decades between these two observations. However, the consensus that we can draw from them is that they both refer to a change targeting *qeltu* including Mosul. We can also notice that this change has been underway for a while and given the considerable social changes that occurred in Iraq, not in the least in Mosul, we can all but expect a process of levelling to be in operation in this dialect.

This change in Mosul has also been a recurrent mention in the press (Yaseen, 2015a, p. 6). For example, Elyas (2013) discusses a retreat of traditional features of Maṣlāwi Arabic and reasons that Maṣlāwi people are "fearing the extinction of their dialect". We also have another observation by Al-damluji (2014) who refers to a change in the dialect and that more non-Maṣlāwi linguistic forms are progressing into the speech of Maṣlāwis. Al-damluji also goes further to argue that MA appears to be "fighting for its survival". Elyas and Al-damluji both point out that this change can be attributed to the demographic change triggered by a number of factors (discussed in depth later in this chapter) that have resulted in more non-Maṣlāwi speech forms making their way into the dialect.

Levelling of Maṣlāwi Arabic, while not yet attracting enough scholarly attention, has raised some public awareness as locals of Mosul keep commenting on the change in their dialect. In this regard, there is an example by Elyas (2013) who cites a popular local TV show titled *ʿal-mūṣəl dənəḥki* (let us talk about Mosul) by the notable journalist Wāthiq al-Ġaẓanfari. In this show, al-Ġaẓanfari, a Maṣlāwi himself, pointed out that the use of Maṣlāwi dialect is retreating, particularly among young people. After this overview of the levelling in Iraq and more particularly in Mosul, the next section will tell us more about the precipitating factors of this process in Mosul (Yaseen, 2015b).

5.5 Reasons why we might expect levelling in Mosul

As we have seen earlier, levelling is a reflex of a number of factors contributing towards a decrease in the use of certain linguistic forms in favour of others from a mainstream dialect. There are a number of levelling-inducing factors that can be gleaned from the recent history of Iraq in general and Mosul in particular. It is convenient to group the list of factors in two broad groups: sociopsychological and sociopolitical.

5.5.1 Sociopsychological factors

5.5.1.1 Urbanisation

Miller (2004, p. 177) points out that the Arab world has seen one of the most significant changes —urbanisation. As we will see in the example of Iraq in chapter 11, urbanisation has actually turned the Arab region into one of the most urbanised parts of the world. The scale of urbanisation is evident in the statistics pertaining to the urban growth in Arab countries. Urban growth has increased to 400% in the period 1970 – 2010 and is expected to reach 200% for the next 40 years (Schäfer, 2013). Urbanisation and its effects have been more noticeable in the oil-producing states, which saw a corresponding economic boom after the rise of oil prices. These developments facilitated urbanising vast areas in those countries and subsequently triggered linguistic changes (Bassiouney, 2009, p. 114). This obtains in many Arab countries such as those in the Arabian Peninsula and Gulf region where these developments have accompanied their creation (ibid.). It has also noticeably occurred in Iraq where the major cities, including Mosul, have been expanded alluring more people to move to them. Sari (2003, p. 850) refers to the high rate of urbanisation in Iraq in which provincial towns have been expanded in spite of the effects of the aftermath of the Gulf wars. In Mosul, new neighbourhoods on both sides of the city have been built (this expansion in Mosul will be further discussed in chapter 11).

5.5.1.2 Migration

Over the past few decades, Mosul has received large swathes of migrants from different parts of the country. The majority of those migrants are of peasant origin and workers who came to the city of Mosul to seek better job and living prospects, especially that Mosul is considered as a key economic centre for employment and services in northern Iraq (Yaseen, 2015b). Families have also been migrating within Nineveh province as a result of rural to urban migration as droughts have affected their farming activities, being their main source of income. This kind of migration has mostly occurred since the 1990s.

As a result of the above, the overall population of the city has increased as evidenced by the relevant official statistics. According to the Statistics Department of Nineveh Governorate, the population of Mosul increased from 1,137,000 inhabitants in 2009 to 1,377,000 in 2014, out of more than 3.5 million of the overall population of Nineveh province (Cited in UN-Habitat, 2016, p. 21).

5.5.2 Sociopolitical factors

5.5.2.1 War

War and its consequences are considered one of the catalysts of dialect change. The demographic upheavals of war often lead to changes in the affected societies. A corollary of wars is displacement where people at risk leave their homes and seek shelter in other safe areas. A major consequence of the recent Gulf war in Iraq was displacement. Soon after the conclusion of US-led operations, a civil war plunged the country. As a result, a huge number of people were forced to leave their homes. Mosul received an increased influx of displaced people (locally known as *muhaǧǧarīn* 'the displaced') from different parts of Iraq after 2003. This has paved the way for more contact between Maṣlāwis and people of different dialects.

5.5.2.2 Arabisation

One of the major consequences of conflict in Iraq was the implementation of the state-mastered policy of Arabisation. This was motivated by civil conflicts occurred in the northern region throughout the twentieth century. The initial phase of this policy can be traced back to the early decades of the last century. It remarkably accelerated in the 30-year period between 1961 and 1991 when successive Iraqi governments repopulated previously non-Arabic-speaking areas around Mosul and Kirkuk with families of Bedouin Arabs brought from other parts of Iraq. This policy aimed at reducing populations whose loyalty considered by Iraqi governments as questionable in this strategically and economically important area (Mockaitis, 2012, p. 237). The majority of the migrated groups were in fact tribes of Arab Bedouins largely coming from the desert-dominated al-Ḥaẓar (i.e. Hatra) area and its surroundings in Nineveh.

Thus, it appears from the factors sketched above that Mosul has a seen an influx of Bedouins over the last few decades. This enables us to the discussion of a related theme that underlies the linguistic change expected in Maṣlāwi Arabic—Bedouinisation.

5.6 Bedouinisation

Bedouinisation has been one of the important phenomena that have shaped the societal and, by extension, dialectal configurations of many parts of the Arab world, not least Iraq. Bedouinisation can be broadly defined as the infiltration of Bedouin–type norms into urban societies (Caskel, 1953). Rosenhouse (1984, p. 3) asserts that Bedouin Arabic[97] forms "the cornerstone" of Modern-day Arabic dialects. The influence of the Bedouin dialects has been visible in the sedentary ones given the continuous contact between both the two (Blanc, 1964; Palva, 1976). This influence is perhaps evidenced by the numerous dialects of Arabic that now exhibit a mixture of both Bedouin and urban linguistic characteristics.

Despite this interesting interaction between the two settings, Abu Haidar (2006b, p. 269) and Palva (1994, p. 459) agree that the focus of the studies on Arabic dialects has been one-sided in that 'stable' Bedouin or sedentary dialects are investigated individually. Thus, it has not accounted for the developments that take place as a result of contact between the two. Abu Haidar (2006b, p. 269) notes that Bedouin dialects *per se* have received a good documentation in the literature on Arabic dialects. Cantineau's study (1937) is one of the earliest treatises on this topic in which he accounted for the šāwi dialects in eastern Syria as well as the adjacent western parts of Iraq. A number of other studies (e.g. Cantineau, 1937, 1940; De Jong, 1996; Ingham, 1997; Palva, 1976; Rosenhouse, 1984, 2006) focused on the Bedouin dialects spoken in the eastern and western parts (i.e. Mašriq and Maġrib) of the Arab world such as Oran, Iraq, Jordan and Arabia.

It is well acknowledged that Bedouinisation has been involved in the linguistic change observed in the Arab world. Albirini (2016) mentions three possible interconnected factors that may explain why this phenomenon has emerged as a catalyst for dialect change in Arabic societies. The first factor is the sociopolitical status of Bedouins who grew in importance, particularly in the political domain. This impacted the sociolinguistic situation of areas such as the Maġrib countries and Iraq. Secondly, the symbolic status of these dialects as an important element of Bedouins' tradition and history has reinforced the Bedouins' attachment to their own dialects. This, in turn, has made these dialects less amenable to change than the urban ones. A third related factor is that the Bedouin communities are very socially organised and this has affected their linguistic integration in the urban values.

Iraq has been a central focus of interest in the literature on Bedouin and urban Arabic dialects in which both dialect groups of Iraqi Arabic (*qeltu* and *gelet*) have been approached. Jastrow

[97] Bedouin Arabic is the dialect of Arabic spoken by people of Bedouin/rural origin (Abu Haidar, 2006b, p. 269).

(2006d, p. 414) notes that Iraq's eventful past has led to its current dialect landscape. As will be discussed further below, the socially and politically motivated migrations and the subsequent Bedouinisation that took place in Iraq have affected the ecological distribution of its dialects. A closer look at the literature and the history of Iraq reveals that it is possible to construct two waves of Bedouinisation. Both of these waves resulted in the influence of Bedouin *gelet* on the urban *qeltu* and the eventual development of a *gelet*-dominated koine. The first wave can actually be traced to the Islamic conquests of Iraq in the 7th century, which led to an influx of Bedouins into some new garrison towns in the southern part of Iraq such as Kūfa and Baṣra where a process of koineisation (discussed further below) took place. Also important had been a number of other events such as the fall of Baghdad to the Mongol forces in 1258 and again in 1400 (May, 2016)[98]. This was followed by the outbreak of a massive plague in Baghdad in 1831 followed by a flood in the Tigris River that completely destroyed some areas of the city. These events wreaked havoc on Baghdad and much of southern Iraq and effectively decreased much of the Arab population whose dialect was of sedentary type.

The general view is that the events sketched above led to the disappearance of *qeltu* dialect from a large section of Iraq's territory. Subscribing to this view[99], Jastrow (2006d, p. 414) remarks that the arrival of Bedouins led to the Bedouinisation of urban dialects. Palva (2009) argues that *qeltu* remained intact in the north as this area did not see a similar scale of the destruction and consequent waves of migration that Baghdad and the southern areas had seen. This wave of Bedouinisation had possibly targeted towns lying along the Euphrates in western Iraq in which migrated Bedouin tribes settled in this area leading to the Bedouinisation of the old sedentary dialects spoken there[100]. Examples of the Bedouin-type linguistic features introduced in this wave are the voiced velar [g] and the affricated (i.e. [tʃ]) forms of [k] in Iraq. Blanc (1964, p. 26) notes that there is evidence from the current as well as past distribution of affrication that it is a feature of people descended from or influenced by the Bedouins of North Arabia. These last two features are discussed in 3.1.1.3.

A second wave can be traced to the arrival of Bedouins to Baghdad over the 17th and the 19th centuries. This wave intensified in the first half of the 20th century with the arrival of more Bedouin-type people from southern Iraq. Abu Haidar (2006b, p. 272) points out that new conurbations such as Sadr City (formerly al-Ṯawra) were established to accommodate the large numbers of newcomers. In fact, the newly built conurbations included both sides (Karkh

[98] See (Man, 2014) for a discussion of the effects of this conquest.
[99] Among other scholars such as Blanc (1964), Versteegh (2001) and Abu Haidar (1991a).
[100] Some *qeltu* dialects still exist there with a change is also reported to be targeting them, as will be discussed here and later in chapter 11.

and al-Raṣāfa[101]) of Baghdad. In the Karkh side, large neighbourhoods such as al-Šuʿla and Abu dšīr have also been built to accommodate the migrated communities. Abu Haidar (ibid.) notes that this movement of people has been instrumental in the introduction of new Bedouin-type linguistic features into the speech of urban dialect spoken in Baghdad. Miller (2004, pp. 183–184) notes that the Bedouins emerged as the demographically dominant group and then this dominance extended to the political sphere. Over the course of the 20th century, the migration to Baghdad intensified solidifying the Bedouinised dialect as the "standard urban dialect".

This wave was also facilitated by some major social changes. Firstly, the Jewish community of Baghdad dramatically reduced after 1948. Secondly, during the rule of the Iraqi monarchy, Iraq's economy experienced some drawbacks. Under this economy, feudalism thrived in the country and tribal leaders emerged as wealthy landowners while peasants bore the brunt of the economy. The crippling effects of this economic environment triggered a large-scale wave of migration from rural areas in southern Iraq to urban areas, mainly Baghdad (Al-Nasrawi, 1994, p. 36). Subsequent political upheavals (e.g. coups and wars) have brought about further changes in the social fabric of Baghdad causing a political rise of Bedouin people[102].

In view of the above, we can deduce that the political and economic developments coupled with the increase of the Muslim community since the Second World War have led to the latter community to overshadow the other religious communities (i.e. Christians and Jews) in Baghdad. As a result of accommodation, CBA dialect forms have assimilated into the dominant MBA ones. Moreover, following the chaotic events that Iraq witnessed in recent decades, CBA speakers have (in)voluntarily fled the country to settle in various non-Arabic areas of Iraq and beyond. The collective outcome of these events has been the dominance of *gelet* in Baghdad as a standard dialect while the dialects of non-Muslims (i.e. Christians and Jews) have declined in use. Blanc (1964) and Abu Haidar (1991a) agree that Bedouinisation resulted in the declining of some CBA and JBA features such as despirantisation. Abu Haidar (1991a, p. 149) finds that there are several pressures that put the existence of CBA "under a great deal of threat". Thus, Abu Haidar (ibid., 150) argues that the survival of this dialect under such conditions is hardly expected and that the social rather than linguistic pressures affecting CBA could result in its "death" citing Scottish Gaelic (Dorian, 1981) as an example of this scenario.

[101] These two names refer to the western and eastern banks of the Tigris River that runs through the city.
[102] In fact, this rise has continued to the present day.

A third wave, I argue, that continues along lines similar to those of the previous waves is now in process with MA as a constitutive element of it. This is exemplified by the supplanting of traditional phonological traits of other *qeltu*-speaking dialects in the west and north of Iraq by mainstream *gelet*-type equivalents. To this end, I will provide evidence (discussed in chapter 11) from this study as well as from the literature to identify what constitutes this wave in which *qeltu* dialects spoken in towns on the Euphrates as well as Tikrit and Kirkuk are reportedly succumbing to the nation-wide *gelet*. It is suggested that the Bedouin people who moved to those towns have had a significant impact on the linguistic situation of their *qeltu*-speaking communities. This movement has been triggered and/or intensified by a number of precipitating factors such as migration, Arabisation, war, internal conflicts, urbanisation and draught.

From the above, we can see that the history of dialectal formation in Iraq has gone through two main waves (with a third wave is now in operation) of Bedouinisation with a resultant *gelet*-dominated koine. The next section will shed light on this related theme of koineisation.

5.7 Koineisation

The theme of Bedouinisation takes us neatly to a related theme — koineisation, which is a widely used concept that seeks to account for contact-induced linguistic changes. These changes often result in a koine[103]: which, broadly speaking, refers to any 'common' dialect that develops between people speaking different dialects (Tuten, 2007). Advancements[104] in the research on this concept have recently included dialects that result from population movements into a new environment such as new towns. In this context, a mixture of speakers come into contact and the concomitant mixing of their different, yet inter-intelligible, linguistic systems may eventually result in a koine (Kerswill, 2013).

Koineisation involves a number of interrelated sociolinguistic phenomena that often work in tandem such as dialect mixing, accommodation, simplification and levelling. Through the occurrence of these processes, a new dialect emerges out of two or more dialects (Kerswill, 2013; Trudgill, 1986). At an early stage of interdialectal interaction, the system of the new koine is often reduced or simplified. It also displays linguistic forms sourced from the dialects of the original mix. The interaction and the sociolinguistic processes between speakers

[103] The term 'koine' is an old term that comes originally from the old Greek word 'koine', which means 'common or shared'. It initially referred to a particular dialect of the Greek language that became the lingua franca between the people of the Hellenistic and Roman eras (Siegel 1985). Later, its applicability extended to other dialects elsewhere.

[104] See for example (Kerswill, 1996a, 2002a, 2013; Kerswill and Williams, 2000; Wodak *et al.*, 2010) for discussions and examples on this.

eventually crystallise into an established contact dialect. Levelling has been one of the sociolinguistic processes that frequently being discussed in relation to koineisation. Dillard (1972, p. 302) posits that a koine is a dialect that shows no traditional features and that it is the "end result of dialect levelling". Dillard also contends that a koine is often, but not always, viewed as a standard dialect. Siegel (1985, p. 364) states despite its long history, the use of the term koineisation is not that old with Samarin (1971) appears to be the first scholar who used it and compared it to the process of 'dialect mixing' giving examples of levelling.

Koineisation is a complex process that takes stages over a long time for its effects to be felt in the context in which it takes place. Siegel (1993, p. 6) outlines the developmental stages of this process, which span the course of several generations. The sociolinguistic research on this theme has suggested that at an initial stage, a 'pre-koine' emerges when different dialects simultaneously, yet inconsistently, come into contact with each other. Over the next generations, this koine then develops into a stabilised dialect that shows a mix of features as a result of several processes mentioned above.

The literature has come up with two main types of koines. Siegel (1985, pp. 363-364) identifies these two types of koines as immigrant koine and regional koine. An immigrant koine is one that develops in a new place where immigrants speaking two or more regional mutually intelligible dialects of the same language are brought together. Siegel (1985) and Tuten (2007) list a number of dialects that can be considered typical cases of immigrant koines such as Milton Keynes, England, New Zealand and Australian dialects of English and Colonial dialects of Spanish. The regional koine, on the other hand, is developed when speakers of regional dialects come into contact with each other. Siegel (1985, p. 364) mentions Greek and Arabic as examples of this type of koines.

Koineisation processes have recently received increasing attention in view of the immigration and resultant koines that have been reported in numerous languages (Tuten, 2007, p. 185). Of particular relevance to our discussion here is Arabic, which has historically been involved in a process of koineisation. Albirini (2016, p. 181) highlights that koineisation has perhaps been the most important process "in the formation and re-formation" of past and present dialects in the Arab world. Researchers (e.g. Blau, 1981; Cohen, 1962; Ferguson, 1989, 1997; Miller, 2004; Versteegh, 1984) who traced the historical evolution of Arabic dialects have all cited koineisation as a key process in the development of both Old Arabic as well as Arabic vernaculars. Anis (1959) argues that Old Arabic developed out of the contact between different Arabic-speaking peoples. In this sense, it developed as a koineised dialect with an admixture of features from dialects of various tribes who met and interacted linguistically.

Albirini (2016, p. 124) notes that this dialect was common in pre-Islamic Arab intertribal communications and literary activities such as poetry competitions. Albirini (ibid.) singles out Mecca as the hub of this process given its status then as an important centre in terms of religion[105], trade and literature. In that pre-Islamic era, Arab tribes used to annually gather during the pilgrimage season in Mecca, which also served as an occasion of trade and literary activities (e.g. poetry contests).

There have also been attempts to understand the development of Arabic dialects by proposing different views on how these dialects developed. Ferguson (1997, p. 616) notes that the general assumption was that Arabic dialects, in general, originated from Old Arabic or a dialect akin to it. However, Ferguson added a refinement to this theory and suggested that a simplified military koine was developed during early periods of the Islamic era. This koine was not similar to neither the earlier dialects spoken then nor Old Arabic although it was used alongside it. Ferguson believes that most Arabic dialects, particularly those spoken outside Arabia, are descendants of this koine and that the differences came from subsequent innovations and borrowings.

Another postulation in this regard is that by Corriente (1976) who posits that a commercial koine had developed in the pre-Islamic era as a result of the commercial dealings between the Aramaeans and Nabateans in the area. This area includes North Arabia, the Syrian Desert and the area between the garrison towns of Kūfa and Baṣra in Mesopotamia. This koine had then spread to the other parts of Arabia given its commercial importance.

Processes of pidginisation and creolisation have also been proposed in this quest. Versteegh (1984) posited the occurrence of these two processes whereby native speakers adopted a simplified version of their Arabic when communicating with foreigners. This reduced variety was learned as a second language. However, it should be noted that Versteegh (2014, pp. 299-300) admits that this view has attracted criticism from other authors (e.g. Ferguson, 1989). This criticism stems in part from the premise that the modern dialects display traces dating back to the pre-Islamic era. This also indicates no hiatus between the pre-Islamic Arabic and the modern dialects we have today.

Of direct relevance to the discussion of koineisation and pretty much to the discussion of this current study are two important points from the literature. Firstly, it is generally noted that central to comprehending the koineisation that occurred during the 7th century is that the language variety that came with the Muslim conquests is Bedouin (Zwettler, 1978). Also

[105] Mecca is home to the *ka ʿba:* the holiest site of Islam as well as being *qibla* (i.e. the direction of Muslim prayer).

crucial to this argument is that the people of the conquered towns and cities with whom the Arab conquerors intermingled were sedentary. Thus, those conquered towns and cities during the Islamic conquests became places of koineisation processes as Bedouin and urban communities met and interacted (Albirini, 2016, p. 181).

Not only has koineisation been cited in the formation and development of Old Arabic dialects, but it has also been reported to affect and formulate many contemporary Arabic dialects. This is largely attributable to the effects of urbanisation and the ensuing movements of people in the Arabic-speaking regions. Indeed, since the late 19th century and largely through the 20th century to present, some sort of rural-urban migration has taken place in the Arabic-speaking areas following the urbanisation of those areas. Chapter 11 will discuss the theme of urbanisation in Iraq and Mosul.

There are a number of studies on koineisation and the relevant Bedouinisation processes in Arab contexts. These studies have discussed a number of social, political and historical considerations to account for the outcome of koineisation in Arabic dialects. The consensus in the literature is that most present-day Arabic dialects show features of both Bedouin and urban dialects given the fact that the dialects of these features have coexisted in the same geographic area and have seen a parallel rather than autonomous development (Albirini, 2016; Holes, 1995; Palva, 1982, 1994; Versteegh, 2001).

Miller (2004) argues that the process of koineisation in Arabic cities has taken two key directions. The first pertains to the old sedentary dialects, which appear to have been confined to certain groups of speakers. The second direction involved the emergence of koineised urban dialects spoken in the main cities through various degrees of mutual mixing and levelling. The degree and scale of these koineisation processes depend on two things here: the historical situation of each area and the relative rate of the rural/urban movement that occurred therein (ibid.). Thanks to the influence of the media as well as the emergence of the nation-states in the Arab region, these emerging dialects expanded to other areas and acted as standard dialects alongside SA (Ferguson, 1988; Miller, 2007; Palva, 1982). Miller (2004) cites a number of cities that have seen this type of development such as Cairo, Damascus, Algiers and Amman, which have become the centre of numerous opportunities in terms of education, business and welfare.

In Iraq, *gelet* offers an ideal example of a koineised dialect, which developed through a number of interrelated processes that started in the phase of ‘Arabicisation’ (Versteegh, 2001) in the early Islamic eras. This was followed by the sedentarisation of large areas of Bedouins, which led to the creation of a koineised *gelet* while the other religious communities preserved

their respective dialects. Muslims in Baghdad today, like other cities in the Maġrib (e.g. Algiers, Oran and Tripoli), speak a koineised version of Arabic while religious groups more or less maintain their own urban dialects (Abu Haidar, 1991a; Blanc, 1964; Miller, 2004). The topic of koineisation will be discussed in detail in chapter 11 where it will be related more fully to the situation of Mosul and Iraq in general drawing on the results of this study as well as other evidence from the literature.

This chapter has discussed the main concepts relevant to the study. It has also reviewed the related studies taking account of these concepts, notably levelling, from the perspective of Iraqi Arabic in general and Maṣlāwi Arabic in particular. The next chapter will take us to the methods used in conducting this study.

Chapter Six: Methodology

This chapter describes the methods used to collect and analyse the data of this study highlighting the rationale behind the decision-making involved in these methods. Before going into the details of each step taken, an overview of the methodological approaches adopted in the study is in order here.

6.1 Methodological Approaches

6.1.1 Variationist sociolinguistics

This study is a variationist account of Maṣlāwi Arabic and is conducted using the tools and approaches employed in this tradition of research. The variationist enterprise seeks to discern the interplay between a range of factors (linguistic and non-linguistic) in conditioning the production of linguistic forms. The methodological origins of this research tradition[106] can be traced to other strands in linguistic research such as dialectology and historical linguistics (Chambers and Trudgill, 1998). Tagliamonte (2013, p. 128) remarks that the establishment of the variationist enterprise is credited to the important study of Weinreich, Labov and Herzog (1968) who introduced the notion of structured variation. Labov further advanced this tradition in his early works (Labov, 1962, 1963, 1966, 1972a). Labov and colleagues postulate that linguistic variation works on the principle that it acts not in a random, as some had previously alleged, but rather an ordered and patterned fashion or what they termed 'orderly heterogeneity'[107]. Variationist research seeks to track the ongoing changes in linguistic systems rather than just the ones that reached completion (Schilling, 2013, p. 4). Researchers thus seek to capture regular patterns of variability and change by quantitatively modelling the relationship (and mostly interaction) between the linguistic and social structures. To discern this relationship, the speech of socially stratified people, often by age, gender and other factors, is investigated as these factors are often reported to be influencing the speech forms of individual speakers and communities in general. As will be shown in some examples later, these attributes are subject to varying interpretations depending on the community being investigated. Therefore, the findings that emerge from this kind of research show both similarities as well as differences in the linguistic patterns of each community. The field of variation is rapidly expanding, particularly through integrating phonetics and phonology to other linguistic (e.g. sociolinguistics and dialectology) and non-linguistic disciplines (Foulkes

[106] Tagliamonte's (2016) book sketches the history of this area of research tracking its beginnings and development to the present day.
[107] This notion was postulated by variationist sociolinguists in the late 1960's to explain what was previously thought as "free variation" (Bortoni-Ricardo, 1997).

and Docherty, 2007). A fuller discussion of this realm can be found in a number of accounts (e.g. Chambers *et al.*, 2002; Foulkes and Docherty, 2006; Foulkes and Docherty, 2007; Tagliamonte, 2016).

6.1.2 Apparent-time and real-time approaches

The current study utilises an apparent time approach to investigate variability and change patterns in MA. This approach is a sociolinguistic construct in which language use is investigated at a single point in time. This approach holds that the speech forms produced by age-stratified speakers reflect the different generations of a community and correspondingly different developmental stages of their dialect. Watt (1998, p. 92) notes that the speech forms of older speakers, for instance, serve as a reflection of an earlier stage of their language and can be compared to those emerging from younger groups of speakers. This is to ascertain if a change is taking place in language use and the extent of that change.

Tagliamonte (2011, p. 43) briefly sketches this approach in the following lines:

> In an apparent time study, generational differences are compared at a single point and are used to make inferences about how a change may have taken place in the (recent) past. Age differences are assumed to be temporal analogues, reflecting historical stages in the progress of the change…Analytically, apparent time functions as a surrogate for chronological (or real) time, enabling the history of a linguistic process to be viewed from the perspective of the present.

Practically speaking, age-delineated samples of the community under investigation are selected for investigation at one point in time. These samples represent different generations of that community. The disparities in the use of speech forms between generations are then interpreted as a change in progress (Sankoff, 2006). The cross-sectional apparent time approach differs from a related sociolinguistic approach called the real-time, which selects discrete longitudinal 'snapshots' of a certain group of speakers selected at different points of a long period of time (Watt, 1998, p. 90). Watt (1998, p. 92) refers to a number of logistic and practical difficulties in the use of real-time approaches. These are likely to arise over the course of time of conducting a real-time research study. One of these difficulties is the reluctance of sponsors to fund a project that requires a decade or more of waiting for its findings to appear. There are also other issues such as changes involving the researcher and or the field research tools they use, which might affect the comparable data gathered in each stage of the project. Also, while a study is in progress, the group of informants being examined may undergo a change in housing as a result of personal or rather social conditions

of their community or may even die (ibid.). This would make it hard to recruit the same speakers for the next phase of the project (Dannenberg, 2000, p. 255).

6.1.3 Acoustic phonetics

The increasing literature on phonological variation has shown us that this variation can also be measured using acoustic methods. There are several advantages in using acoustic methods to investigate variation. The main advantage of using this approach is that it results in objective measurements that are subjected to instrumental verification rather than just mere listening (Milroy and Gordon, 2008, p. 148).

The integration of instruments and techniques of acoustic phonetics in investigating phonological variation was established in sociolinguistic research by Labov, Yaeger and Steiner (Labov *et al.*, 1972). Milroy and Gordon (2008, p. 145) note that it has since been facilitated by technological developments that made possible the use of smaller devices in performing acoustic analyses. They also highlight the use of spectrograms in visualising measurements as this use enables researchers to observe more details and make more precise measurements of acoustic correlates of interest than auditory techniques. Foulkes and Docherty (2007, p. 60) review the use of instrumental techniques in analysing variation in American and British English contexts and point out that it has always been fundamental to sociolinguistic research, especially that involving vowel formant analysis.

This type of analysis is now increasingly used to examine complex aspects of sounds such as changes, quality and duration. This is evident in the increasing number of studies that utilise this type of analysis in investigating variation in those aspects. Examples and more detail will come in later parts of this study, which also employs instrumental techniques in investigating the speech data.

6.2 Piloting

Piloting is one of the useful techniques used in sociolinguistic research to improve a number of aspects of a research project and to address any issues that may arise in conducting it. In this respect, Campbell-Kibler (2013, p. 144) notes that piloting can improve the quality of the data and the stimuli used in a research project. Milroy and Gordon (2008, p. 141) note that piloting also helps in finding/selecting linguistic and non-linguistic variables of interest to the topic being investigated. However, Milroy and Gordon (ibid.) note that piloting should not exceed the ambition in terms of scope and organisation. Piloting also has an important advantage in that it can help in assessing the appropriateness and suitability of methods or tools the researcher intends to use (Van Teijlingen and Hundley, 2002).

With the above discussion in mind, I gathered some data in a pilot study in order to serve three main purposes. Firstly, it helped to gain an overview of patterns of variability in the phonological variables selected for investigation in the main study. Secondly, it helped detect any issues[108] that needed to be avoided in the study. This helped to maximise the effectiveness of the main study. Thirdly, it was also intended to help choose the phonological variables for analysis in the main study from a number of initial variables. In this sense, it served as a confirmatory measure of the variables considered for analysis in this study.

6.2.1 Selection of phonological variables

One of the first steps that researchers should take in analysing variation is to identify the candidate linguistic variable(s). The linguistic variable can be defined as two or more different variants/forms that can be used in an environment of a single linguistic variable (Walker, 2014, p. 441; Wardhaugh and Fuller, 2014). A number of potential variables were initially considered for the study falling into two basic categories: consonants and vowels. The pilot study revealed that not all of the candidate variables initially considered for analysis would be plausible for a study of this kind. Some variables, such as the use of pharyngealised [ðˤ] for plain /ð/, were eliminated from the study for lack of enough tokens. Watt (1998, p. 127) notes that it is difficult to relatively assess infrequent items to make reasonable and statistically sound generalisations. Exploring the data showed us that some variables are lexically infrequent and thus could not lend themselves to a study of this scale and the methodology intended to be adopted. For instance, the use of pharyngealised [ðˤ] occurs in a few words such as the following:

/tðuːq/ → [tðˤoːq] 'she tastes'

/ðuʁa/ → [ðˤuʁaˑ] 'corn'

Such variables were ruled out while others were retained for further investigation, to each of which I will dedicate a chapter. The dependent variables selected for analysis run as follows:

6.2.1.1 Consonants

1) *The Rhotic variable*

MA has a uvular [ʁ] for this variable, whereas it is apical [r] in *gelet* dialects, as in the following examples:

MA **_Gelet_** **Gloss**

[108] These relate to, e.g. choice of questions, recording conditions and other practicalities in data collection and processing.

[ʁiːʃ] [riːʃ] ‘feathers’

[ʁəħtu] [rəħət] ‘I went’

2) *Qāf (q)*

This variable concerns the use of voiceless uvular plosive [q] in MA as against the *gelet* ones, i.e. [g], [q], [k], [dʒ] and [ɣ], as in the following examples:

MA	***Gelet***	**Gloss**
[qaːl]	[gaːl]	‘he said’
[waqət]	[wakit]	‘time (n.)’
[qəddaːm]	[dʒəddaːm]	‘ahead’
[ħadiːqaˑ]	[ħadiːqa]	‘garden’
[qarjaˑ]	[ɣarja]	‘village’

These variants do have their own distribution constraints. More detail on this will come in section 8.3.1 below.

6.2.1.2 Vowels

1) *The MOSUL vowel*

This concerns the realisation of the high back rounded vowel /uː/ as a back rounded vowel [oː] as in /suːq/ → [soːq] ‘market’.

2) *Word-final (a)*

Qeltu dialects have different realisations of this variable depending on the context, as will be explained later in chapter 10. Although previous literature is lacking, it can be noted that this variable in Mosul is back and relatively longer than that of *gelet* dialects, which have shorter realisations. It is also mostly a mid-front realisation in *gelet* (Blanc, 1964, p. 32). I can illustrate this in the following examples:

Gelet	**MA**	**Gloss**
[inta]	[ənta˙][109]	‘you (m. sg.)’
[hijja]	[həjja˙]	‘she’

[109] As will be discussed further in chapter 10, the durational average of the word-final (a) is rather longer in MA, particularly for old generations, than in *gelet*. In this study, the durational overall by all speakers was 97ms. Therefore, it was notated here as half-long.

Some of the variables were chosen as a result of my exposure to MA in informal contexts largely through personal contacts with Maṣlāwi natives and television, while others were chosen in light of previous descriptions in the literature. The selection of specific linguistic variables is often based on one or more reasons. In this study, the variables sketched above were considered prime candidates for this study on the following grounds:

i) All the variables are described as characteristic of, or peculiar to MA. The choice of these variables was motivated by the urge to quantitatively explore variability patterns that have been merely mentioned in passing or observed as part of broad descriptions of *qeltu*. As stated in previous chapters, previous literature on MA is rather scarce and many of its aspects are hitherto not adequately explored. Therefore, this will help address a main dialect of *qeltu*.

ii) Another reason for this selection was the need to assess many commentaries and impressionistic observations (e.g. Palva, 1983) that the use of MA is receding in the face of *gelet*. Therefore, I hypothesise a change in the use of the selected traditional variables towards *gelet* alternative realisations.

iii) The fact that these variables are lexically frequent has also informed their selection as this would not impose problems for conducting a quantitative study of this sort.

After this brief overview of the phonological variables and how and why they were chosen, I turn now to describe the dataset obtained and the decisions involved in constructing it.

6.3 Dataset

The dataset upon which the results of this study is composed of informal conversations recorded for a set of speakers. Chambers (2013, p. 1) reasons that it is agreed among researchers that in order to obtain "the ideal data" for investigating the social dimension of language use, the data should be elicited when produced in their natural, nonchalant setting. This type of speech data helps reveal actual variability patterns and distribution of linguistic forms across individuals and communities. The sociolinguistic literature has reported that eliciting naturalistic data is often confronted with a certain issue called the observer's paradox (Labov, 1972b, p. 209), which Labov defines as: "the aim of linguistic research in the community must be to find out how people talk when they are not being systematically observed". To overcome the effects of this situation, researchers seek a number of solutions when they perform the recording process. One such way is incorporating intervals and breaks that can make the informants assume they are not being recorded (Labov, 1972b, p. 92). Also important in this regard is incorporating stories to elicit responses that arouse the informants' emotion, which proved to be successful in producing natural speech (ibid.). These

manoeuvres could help to make the informant pay less attention to their speech. Schilling (2013, p. 158) refers to another successful strategy in obtaining natural speech that is the use of fillers. These are additional material irrelevant to the purpose of the study the purpose of which is to make the stimuli look random. This would in turn prevents the participants from observing any patterns or potentially uncovering the purpose of the study, which may affect the way they produce their forms. Over the course of this chapter, I will detail the techniques and procedures taken to minimise the effects of this issue and obtain as naturalistic speech as possible.

6.3.1 Tokens

When it comes to obtaining tokens for variables of interest in this type of studies, there are a number of things that researchers often put into their consideration. One of these considerations is the number of tokens to be coded. Macaulay (2009, p. 31) notes that to do a quantitative study, a satisfactory number of tokens needs to be obtained for each variable and each speaker sampled. An important point that needs to be considered in this regard is the proportion of tokens per speaker. Tagliamonte (2011, p. 136) discusses this point and notes that the disproportionate distribution of repeated tokens among speakers may run the risk of skewing the data. She illustrates that with an example of the variable (t,d) in which using a large amount of, for instance, monomorphemes (*mist*) than other forms such as past tense (*missed*) across speakers may result in a skewed analysis of the variable. Wolfram (1993, p. 214) recommends that a limit of no more than three instances of a given token per individual could be imposed. He (ibid.) notes that this is to ensure the dataset has a range of lexical items and is not skewed by excessive repetitions or very frequent words. It is also to ensure that the variability in the dataset is optimally represented.

In view of the above, repetitions of the same lexical item that contains each of the four variables was capped at a maximum of three per token per speaker. All the tokens coded for the relevant variables (Table 6) available in around one hour of speech recorded for each speaker were coded. The tokens available in the dataset, amounting to around 30 hours of natural, spontaneous speech, were then extracted and coded for a variety of linguistic and non-linguistic factors, all attended to throughout this chapter. The tokens[110] were coded and processed in Microsoft Excel spreadsheets, one sheet per individual variable so that they could then be conveniently used in the statistical tools used for statistical analyses.

[110] An overview of the spread of the data, i.e. the distribution of tokens for each variable will come in the chapters dedicated for each variable.

Variable	Number of tokens coded
Qāf (q)	2412
Rhotic variable (r)	2658
MOSUL	1995
Word-final (a)	2590
Total	9655

Table 6: Distribution of tokens for each variable.

6.4 Independent variables

The previous sections have given us an overview of the phonological (dependent) variables to be assessed, this section deals with the independent factors incorporated in the study and against which the speakers' production of the dependent variables are assessed. One of the fundamental tenets of sociolinguistics is that communities show multilayered, macroscopic differentiations distributed by social attributes such as age, gender, class or ethnicity (Kerswill, 2007). These attributes are called independent variables and include a range of linguistic or non-linguistic factors (e.g. social, stylistic) that condition or constrain the distribution of a linguistic variable. Sociolinguistic studies examining linguistic variables principally seek to examine the relationship between the different forms of a linguistic variable and the independent variables that condition them (Wardhaugh and Fuller, 2014, p. 156).

In sociolinguistics, researchers differentiate between two broad groups of independent variables: internal factors and external factors. Language-internal factors are linguistic constraints inherent in the linguistic subsystems (i.e. phonology, syntax, phonetics, etc.) in conditioning the distribution of certain variants. For example, the voiceless fricatives /f /, /θ/, /s/ and /ʃ/ in Iraqi Arabic are replaced by a voiced fricative of the same place of articulation class (i.e. [v], [ð], [z] and [ʒ] respectively) when they come before a voiced stop. Compare the following examples (Erwin, 1963, p. 36):

/ħufðˤat/ → [ħuvðˤat] 'she memorised'

/tiθgal/ → [təðgalˠ] 'it becomes heavier'

/asdaːs/ → [azdaːs] 'sixths'

/maʃɣuːl/ → [maʒɣuːl] 'busy (m. sg.)'

On the other hand, language-external constraints include social, geographical and stylistic factors. Social factors include the established speaker variables such as age, gender, social

class and ethnicity while stylistic factors refer to the contexts of the speech situation whether it is, for example, formal or casual. Also, Al-Wer (2006) refers to physical features such as rivers and mountains as factors that could affect linguistic variability citing two works on Arabic (Behnstedt and Woidich, 2014; Jong, 2011) that show such an effect.

6.5 Independent variables in this study

In their choice of these variables, researchers may rely on their intuitions or their understanding of and exposure to the community they want to investigate (Watt, 1998, p. 106). In the next sections, I will review and justify the choice of the variables I wish to investigate in this study. These will be categorised according to the two categories sketched earlier: external and internal.

6.5.1 External factors

Three variables were chosen for this study: age, gender and social class. Other possible factors such as ethnicity and geography were not considered as all the speakers are Arabs and natives of a single locality that is Mosul. It is well established in variationist research that these chosen categories are correlated with structured linguistic variation. Therefore, the analysis of these factors would help reveal aspects of the social patterning of the dialect and trace any potential changes in apparent time and thus be revealing with regard to the phonological system of Maṣlāwi accent. For example, analysing age can show us whether there is a change in progress while analysing gender and class can give further insights on the social dimension of the change in the community of Mosul. To exemplify this, one of the cross-linguistic observations on the role of gender is that women tend to lead in the use of innovative features. Different motivations and interpretations have been suggested for the understanding of this behaviour. These will be reviewed and discussed, where applicable, in relation to the case of Mosul should any gender patterns emerge from the analysis. Along with the categories discussed above, social class is also another factor that is often correlated to the speech behaviour of communities. This factor is open to different interpretations and categorising schemes, as I will discuss in later sections. The subsections below account for these variables in turn and in more detail.

6.5.1.1 Age

Llamas (2007a, p. 69) notes that age is one of the important factors in shaping the ways people behave toward each other, not least linguistically. However, Llamas posits that age is still not a fully discerned category and that it has also not been given the attention it deserves

in the studies of linguistic variation. Age is employed to explore the linguistic use through time as an important predictor of linguistic change. This is operationalised by exploring the discrepancies in language use between generations, which reflect different stages of language development.

It is common in the sociolinguistic research to broadly group the recruited speakers etically or emically (Eckert, 1997, p. 155). Eckert (ibid.) highlights that researchers (e.g. Labov, 1966; Trudgill, 1974) adopting the etic approach group speaker samples into random but equal age units such as years and decades. In the emic approach, speakers are grouped into cohorts according to shared experiences related to their life and or to the history of the community involved as in studies such as (Horvath, 1985; Wolfram, 1969). Llamas (2007a, p. 72) finds that it is now practical and convenient in variationist quantitative studies to group speakers into age cohorts to discern change in progress in speech forms. In addition to what was sketched earlier, Al-Wer (2006, p. 630) notes that this way of categorising speakers is preferred in most sociolinguistic research as it supports a solid analysis. In the current study, I grouped the speaker sample into three cohorts. These will be discussed below when I come to discuss the speaker pool sampled for this study.

The literature we have on linguistic variation in Arabic dialects has shown us that age is a significant factor in this variation. There are a number of variationist studies (e.g. Al-Rojaie, 2013; Al-Wer, 1991; Dendane, 2013; Ismail, 2007; Jabeur, 1987) that have furnished us with consistent findings that are in line with those of western dialects. A major finding that runs through these studies is that young speakers tend to use incoming innovative features rather than traditional ones in their speech. They are thus leaders of change in their communities. On the other hand, older people tend to behave as guardians of the traditional speech forms of their dialects. As change is one of the main aims of this study, age remains a core factor that needs to be taken into account in assembling a set of speakers for a study of this type.

6.5.1.2 Gender

Gender is one of the most important social attributes considered in the variationist research in which it is well established that it reflects linguistic differences. Cameron (2008, p. 724) defines it as “the cultural traits and behaviours deemed appropriate for men or women by a particular society”. Of all social variables, gender is also one of the most extensively investigated in terms of language variation and change. Coates (2007, p. 62) notes this research has seen a surge over the last thirty years insofar that it is now difficult to fathom why this factor was overlooked in the early research of sociolinguistics. Coates discusses the reason behind this ignorance stating that early research was mostly interested in how variation

is mapped across speakers' age, socioeconomic and ethnic backgrounds. The gender-differentiated language use started effectively in the 1970s when Lakoff (Lakoff, 1973) brought these differences into more focus and posited that the power imbalance between women and men is the key reason behind their gender-related differences.

Until fairly recently, variationist research has been characterised by rather limited understanding and interpretation of the role of gender whereby the social and linguistic differences were attributed to the biological division of the speakers being male or female (Coates, 2007, p. 63). However, Coates (ibid.) remarks that by the end of the last century, scholars started to consider a set of socially and culturally motivated practices that may affect our speech forms.

Chambers (2003a) explains the distinction between sex and gender in that the former refers to the innately predetermined biological traits whereas gender refers to a set of behaviours or practices determined by the society and culture in which we live and interact. In fact, the consensus in the field is that the variation we display in our speech is largely interpreted in this light rather than as a result of our biological divide and the tendency in sociolinguistic research now is to treat gender as such.

As we will see in this section and later in chapter 11, the literature on gender variation has reported that social and cultural practices vary across communities. Therefore, the findings and the interpretations suggested for them this literature do vary as well. Previous research has reported complicated roles of gender in relation to other social variables such as age, ethnicity and social class in influencing linguistic variation. This is due in great part to the fact that most of the research reveals an interaction between gender and these factors. It is also because of the peculiarity of each case investigated. However, there are common findings often reported in the literature on gendered variation in English-speaking areas. A robust finding often reported in quantitative sociolinguistic studies (e.g. Cheshire, 2002; Labov, 1972a; Tagliamonte, 2011; Trudgill, 1986; Wolfram and Fasold, 1974) is that in communities showing a linguistic change in progress, it is female speakers who are more likely to lead that linguistic change by using innovative forms. A number of interpretations have been suggested to explain this orientation. One such interpretation holds that women tend to pay attention to linguistic forms that are socially evaluated (Coates, 2007). Coates explains that this is particularly so when women feel they are under social pressure. For instance, women were found to be adopting forms that index social class to make up for their limited opportunity to assume high social positions.

There are many studies on gender-related linguistic variation in Arabic dialects (e.g. Abdel-Jawad, 1983; Abu Haidar, 1989; Al-Wer, 1991, 1999; Hachimi, 2005; Haeri, 1991, 1994; Taqi, 2010). Albirini (2016, p. 196) points out that the study of language variation involving gender in the Arabic-speaking areas has largely followed the early Western tradition in that it also did not distinguish between gender and sex. Other studies (e.g. Abu Haidar, 1988a; Jaber, 2013; Jaber and Krishnasamy, 2012; Mejdell, 2006) have probed the extent to which women and men approximate SA. These studies have reported the universally reported trend in which women tend to prefer standard forms. However, other studies (e.g. Abdel-Jawad, 1981; Abdul-Hassan, 1988; Al-Wer, 1999; Ibrahim, 1986; Kojak, 1983) have reported a contradictory pattern in which men use more SA features than women. This shows that communities differ in their gender-based linguistic usage.

Albirni (2016) and Al-Wer (2014) refer to a turn in this research as more recent work has moved away from considering SA forms as the 'standard' or 'prestigious' target forms toward which men and women shift their speech. Rather, women and men were found to be orienting themselves toward speech forms of a regional or national dialect considered as prestigious or standard. Another finding reported from this research is that it is young female speakers, in particular, who show a change in their speech. On the other hand, older women tend to preserve the traditional form(s) of speech. Albirini (2016, p. 199) notes that these findings tell us that the Arabic-speaking world shows both social and cultural diversity. He also finds that the results we have on gender in this part of the world present a challenge to discern a generalised pattern about the speech forms in Arabic-speaking contexts. From the above, we can see that the rather complex situation of Arabic-speaking communities necessitates the need to take into account the peculiarity of each case so that a meaningful interpretation is reached.

6.5.1.3 Social class

Social class is also one of the most important concepts often assessed in sociolinguistic research. The importance of this social attribute in affecting linguistic use has long been highlighted in sociolinguistic arenas given the relationship often reported between the social and linguistic meaning of language use. While this factor may invite a much deeper discussion given its multifaceted scope, I will try to review the main considerations taken in linguistic research to define and categorise this social factor.

Kerswill (2007, p. 51) notes that the 'class-consciousness' people have of their position in the social stratification structure has been of particular pertinence to the study of sociolinguistics. Kerswill (ibid.) remarks that this consciousness is reflected in their language choices and their

perception of the world around them. He cites Britain as an example where class divisions have led to class-based differences in the dialects and accents of the country.

When it comes to defining and categorising class, there is a consensus, at least among sociolinguists, that this has been problematic. Guy (2011, p. 161) admits that measuring class, while essential for sociolinguistic research, poses a problem for researchers. Milroy (1987) also highlights that there is neither a consistent interpretation of class stratification nor a way to operationalise it across the world. This, in fact, has to do with the fact this social construct differs across cultures, as we will see below in the discussion of this factor in the Arab world.

What further complicates the picture is the fact that class interacts with a number of other social variables. However, Giddens (2001) highlights that until the 1980s, the treatment of social class was divorced from other factors. For instance, stratifying the society was "gender-blind" as previous research has failed to recognise and appreciate the roles and responsibilities of women, being financially dependent spouses. However, with more involvement beyond the reproductive sphere, women's role has started to attract more attention (ibid.).

There is an increasing amount of literature on the correlation between linguistic patterns and social class. A quick review of the literature will be given here and a fuller one will be given in chapter 11 in the discussion of class-related results of MA. In his important study on New York City (Labov, 1966), Labov established that the social class (among other factors) is correlated with the pronunciation patterns in the speech of the inhabitants of the Lower East Side of New York City. A number of studies (e.g. Macaulay, 1976; Reid, 1978; Trudgill, 1974; Wolfram, 1969) have followed suit and found that, in most cases, people of higher class backgrounds tend to use standard forms while stigmatised forms often feature in the speech of people of lower class backgrounds.

In line with those in the Western world, studies on Arabic dialects have attempted to define this social attribute although there are some well-known difficulties in establishing a conceptual framework for social class in the Arab world. Although social class is open to more than a single definition, it generally refers to the stratification of members of a society into a hierarchy of class strata (Al-Wer, 2006). Albirini (2016, p. 201) notes that social class can be defined as the "culturally and discursively constructed categories that mark people's unequal access to power, valued resources and career opportunities within a specific social setting". In the Arabic-speaking areas, the relationship between social class and linguistic variation has not been comprehensively investigated inasmuch as it is not easy to consistently define this construct across Arabic-speaking societies (ibid.).

Researchers have suggested a number of other factors that can be adduced for this scarcity of studies. Owens (2001, p. 445) notes that one of the reasons for the "absence" of social class in early Arabic research may be that class has not been as effective as other variables such as ethnicity and education in influencing linguistic variation. Owens also refers to another possible reason is that class may be reflected more conspicuously in the prestige attached to speaking a foreign language. The literature has also identified other factors such as tribal and family distinctions that operate more prominently in the society. Nydell (2012, p. 60) highlights this point and notes that there is no class struggle among Arabs who tend to endorse the class predetermined for them by birth and make no attempt to seek higher positions of its hierarchy. Al-Wer (2006) highlights a problem in the existing studies on this variable in the Arab world in that they have often relied on indicators of social class gleaned from the rest of the world, which may not be congruent with Arab societies. Bassiouney (2009, pp. 115-116) also refers to this lack of research and identifies a number of reasons behind it stating:

> The reason for this is that researchers still lack the economic and social data that can help them define social class. Linguists still know very little about how class status is defined in the Arab world, especially for the old elites. There is also the problem of access. How can linguists who do not belong to an elite class in the Arab world themselves have access to the upper elite classes, for example? The upper class in the Arab world can keep social scientists out of their lives in a way the middle and lower class cannot.

There are a number of studies (e.g. Habib, 2010; Haeri, 1991; Ibrahim, 1986; Schmidt, 1984) on the role of class in Arabic variation. These have provided conflicting results regarding this role. In her study on variation in Egypt, Haeri (1991) found that palatalisation was significantly higher in the speech of upper middle class informants, particularly women, than other social categories she investigated. However, no role for class was found in other studies. A good example of this is Habib's (2010) study in which she investigated the alternation between the uvular stop [q] and the glottal stop [ʔ] variants of /q/ in the speech of rural migrants in Emesa (Ḥomṣ), Syria. While her data reported that factors such as gender, age and place of residence were significantly conditioning the alteration between these two variants, social class appeared to be of no role in this alternation. Albirini (2016, p. 202) believes that it is the "fluid nature" of social class in Arab societies and the difficulty in understanding this concept that lie behind the inconsistency shown in these findings. Al-Wer (2006, p. 634) notes that although there are common indicators such as level of income and education, job and place of residence, there remains no rule of thumb for classifying the class system given

the potential fluctuations of people's social status over time. In section 6.1.1.2 below, I will discuss how I operationalised class in assembling the speaker sample for this study.

6.5.2 Internal factors

Recall that language-internal factors are those inherent in the linguistic subsystems. For example, neighbouring sounds may influence the occurrence or not of certain forms of a language. Walker (2014, p. 445) notes that there may be some language-specific constraints that need to be taken into account. The literature we have on Mosul has reported that the variables under scrutiny in this study tend to vary according to linguistic factors such as adjacent sound and lexical item. In addition to these, other constraints that are specific to certain phonological variables such as stress in the rhotic variable and morphological status as in word-final (a) have also been included. Therefore, I coded these and other factors to assess their role in conditioning the variability and change patterns of each variable. The factors coded for each variable will be detailed in each relevant chapter.

6.6 The Maṣlāwi-speaking community

Modern cosmopolitan societies often subsume different intermingling groups of people. As been discussed earlier, Mosul is a case in point here given the different groups of people in the city. Therefore, defining the sampling universe (Sankoff, 1980) is a key decision for any study that accounts for a dialect of a society like this. This is because a suitable pool of speakers from the defined community can then be recruited. Milroy and Gordon (2008, p. 26) point out that in most sociolinguistic research, defining the sampling universe of people is often a straightforward step to take in that researchers may use certain criteria such as the locality and or the social or ethnic background of speakers to define the community of interest.

The native Maṣlāwi speakers are locally described as *qḥāḥ* [qħaːħ] or *qīqu* [qiːqu][111]. These speakers can be found on both sides of the city, particularly in the old narrow alleys *ʿawjāt* in the centre of Mosul. A better understanding of the Maṣlāwi community warrants a comment on this community. The MA-speaking society has its very own characteristics that distinguish it from the rest of Iraq. Unlike the largely tribal-based society of the rest of Iraq, Mosul is known for having its *bəyūtāt* 'families' structure rather than one that is based on tribal affiliations. Iraqis traditionally tend to identify themselves with the tribe to which they

[111] *Qhāh* is the most common word and is used by non-Maṣlāwis to describe Maṣlāwis who in turn use it to describe themselves too. The singular form of this word is *quḥḥi*. *qīqu* is less common and is also used to describe the way Maṣlāwis speak.

belong, by name and affiliation. A string of notable families have long lived in Mosul labelled, in large part, by their profession or occupational background rather than by a tribal name (Alkhaledy, 2011; Mahmood and Hasan, 1992).

The community life of most of the urbanised societies of the Arab region is relatively more liberal and free compared to the rather strict rural/Bedouin-dominated environments (Farsoun, 2013). Iraq is a case in point here where the difference between Bedouin-type and urban civilised societies is conspicuous. This manifests in the difference in the type and scale of freedoms and liberal ways of life that both communities exercise. Azeez (2011, p. 477) finds that while Maṣlāwis are an urban community, they are known for their conservative way of life although they still distance themselves from tribal values. As such, they strike a balance between these conflicting orientations as they tend to maintain their being of an urban community but still in a conservative way. There are a number of aspects that can illustrate this conservatism. It is known that Maṣlāwis are an endogamous community in which the priority is often given to members of the Maṣlāwi community in terms of establishing ties of kindred and marriage (Al-Dewachi, 1975, p. 10). The practice of endogamy is common in most Arab societies, notably those of rural backgrounds where marriage is largely contracted within kinship. In an urban society, the case is rather different in that exogamous practices are more likely to be found and thus the matrimonial relationships are wider. Although Mosul is an urban centre, Maṣlāwis exercise endogamy and this is because they naturally tend to have a sceptical attitude towards strangers (Azeez, 2011). However, commentaries from locals, informants of this study and friends of mine suggest that this practice, while still in operation in the community, has recently lessened to a certain degree. The reason for this relaxation in the practice can be ascribed to the increasing contact Maṣlāwis are having with outsiders whereby relationships develop through different channels; matrimony is one of them.

As will be discussed in depth in chapter 11, there is another facet of the conservative nature of Maṣlāwis and this can be seen in the type of parental and upbringing practices common in the Maṣlāwi society. Maṣlāwi parents tend to instil a conservative ethos into the personality of their children. This is reflected in the strong sense of family loyalty and togetherness that implies limited independence for children even after they grow up. Alkhaledy (2011, p. 418) notes that due to historical events and crises (e.g. economic sieges and military coups) that the city has experienced, Maṣlāwis tend to converge towards themselves more than people of other cities. Azeez (2011, p. 477) points out in this regard that these historical events have had their bearing on the social and psychological adjustment of Maṣlāwis who try to maintain privacy and conservatism, particularly in social upbringing. In fact, some informants of this

study have noted that Maṣlāwi parents tend to allow little freedom of choice for their children, particularly as regards issues such as involvement in the political arena given the experiences Maṣlāwis have had in this particular point[112]. Maṣlāwis are even compared, by way of illustration, to a domestic bird protecting its baby chicks by her wings in reference to the type of protection Maṣlāwi parents exercise in bringing up their children.

6.6.1 Speaker pool

In order to perform robust statistical comparisons, variationist studies often seek to recruit a speaker sample with a balanced number of participants stratified according to parameters such as age, gender and social class (Labov, 1966). For studies interested in assessing a linguistic change in a given community, a quota of age-stratified speakers then needs to be assembled (Meyerhoff *et al.*, 2012, p. 132).

As discussed earlier, in quantitative linguistic research, informants are often divided into broadly defined age or generation groups. In the current study, speakers will be grouped into youth, middle-aged and old-age groups (sketched separately below). Speakers of childhood and adolescence age will not be considered as they fall outside its remit.

These age-related categories, while universal in most respects, are still culturally differentiated. Al-Wer (2006, p. 630) contends that for variationist sociolinguistic studies to ensure justified sampling technique and analysis, the social dimension of age groups in a community needs to be adequately understood. She exemplifies this by noting that while human life stages appear to be, in theory, parallel in both Arab and Western communities, there are some practical differences between them. This is particularly the case in the behaviour of youth who tend to assume a more independent way of life at a relatively later age in Arab societies compared to their Western counterparts. The next section will sketch the age brackets sampled in this study.

6.6.1.1 Age cohorts in this study

With the discussion presented above in mind, three age groups were chosen. These correspond to three life stages: youth (18-30), middle age (31-45) and old (50+). These three age groups represent three generations of the Maṣlāwi people who have seen the changes in the Maṣlāwi society in recent decades. Upon the discrepancies that may appear between generations in the use of phonological variables, we can assess if Maṣlāwi Arabic is

[112] A good example of this is the uprising, which broke out in Mosul in March 1959 and was led by anti-communist army officers to overthrow the then newly formed republican regime of Iraq. That resulted in a tragic number of casualties in the city.

undergoing change.

a) Youth: young speakers are often described as agents of change in their own right given their often-reported use of non-traditional and innovative linguistic forms at the expense of local forms. This cohort is also called 'young adults' as in (e.g. Llamas, 2007a, p. 73). The MA speakers of this group were born during or after most of the major events and changes (described in chapter 5). These have often been cited as the reasons behind the sociodemographic and linguistic change that Mosul and its society have seen.

b) Middle-age: Holmes-Elliott (2015, p. 46) notes that middle-aged people tend to be 'conservative' and concentrate on improving their job profile and/or on performing domestic duties. Their behaviour is often viewed in relation to what is termed 'the Linguistic Marketplace[113]' whereby speakers manipulate their linguistic resources to fulfil their social and stylistic needs and aspirations (Sankoff and Laberge, 1978).

c) Old age: People at this stage of age are burdened with relatively far fewer responsibilities and interactions (Eckert, 1997, p. 165). The speech behaviour of this group tends to be more stable and represents an older stage of the dialect they speak. This is inasmuch as they are faced with fewer interactions in their life as less pressure is placed on them to yield to innovative linguistic forms (ibid.).

6.6.1.2 Social Class in the speaker pool

Although much has been published about social class in language variation, there remains a paucity of studies on this aspect in Iraqi Arabic. We also lack backup data to establish a class-based classification. This paucity of information and the changing situation of society make it both a theoretical and methodological difficulty for researchers. However, one of the effective ways that researchers can employ are judgments made by locals of the community of interest to describe the class system of their community. Johnstone (2010, p. 209), among others, notes that place of residence is often used to establish a class-defined sample for a research project. Watt (1998, p. 98) points out that the knowledge that community insiders, whether ordinary people or researchers, have about their own community could serve as "a very reliable indicator" of class types that exist in the community. He gives the example of the Phonological Variation and Change corpus[114], which was collected that way.

In view of this, the speakers recruited for the current study were categorised according to the neighbourhoods they come from, as these are the best indicators we have to classify Maṣlāwis

[113] The linguistic marketplace is a metaphor used in sociolinguistic research to describe the role the language plays in determining an individual's position in the society.
[114] Further information on this corpus can be found here http://research.ncl.ac.uk/decte/pvc.htm.

in terms of class. This was further supported by the fact that the Maṣlāwi society is endogamous and is of sibling-protective[115] nature as this would also ensure that families stayed in the same neighbourhoods for generations. This, in turn, corroborates the social-class affiliations of the neighbourhoods in question and makes neighbourhood a good proxy for social class classifications.

In this study, neighbourhoods on the Left Bank were categorised as middle class and those on the Right Bank as lower middle class. This was based on the information we have on the neighbourhoods of Mosul and their formation history coupled with the informants' insider information on them. Accordingly, each speaker was categorised according to the side of the city she/he comes from. This was corroborated by the speakers themselves who self-identified as being either lower middle class or middle class according to this distinction. Lower class (or working class) was not considered as the members of the lower class are peasants and labourers, largely those who hail from neighbouring villages and locally known as *ǧaryāwi*[116] people. There might be Maṣlāwis of poorer backgrounds who would be classified as lower class. However, it was not possible to have access to them throughout the course of this study the sample of which was assembled here in the UK rather than *in situ*. This was because throughout the course of this study, Mosul was out of the control of the Iraqi government, which made conducting the recordings *in situ* impossible. Furthermore, the regulations set out by Newcastle University also required students not to jeopardise their lives doing research in war-hit areas. Hence, the decision was to recruit Maṣlāwis recently moved to the United Kingdom.

The lower middle class primarily consists of families that practice a range of common occupations such as carpentry, metal-working occupations, goldsmithing as well as semi-professional crafts (all of these occupations are practiced in specified areas in the Right Bank). It also includes owners of small business and mid-ranking employees in local governments. The family members of this category may have some college or university-level education and earn a decent living. The middle class in Iraq, mostly living in major urban cities such as Baghdad and Mosul, comprises various high earning professionals such as academics, engineers, businesspersons, managers and high-ranking military officers. The Maṣlāwi people who fit these categories live in the modern Left Bank residential areas named according to these categories. For instance, Ḥayy al-ḍubbāṭ 'quarter of officers', Ḥayy al-

[115] Maṣlāwi parents tend to let their married sons live in the same house or in an extension of the same house, conditions permitting.

[116] The term *ǧaryāwi* (literally means 'villager') is a term used among people of Mosul to refer to the residents of the city who have come from the villages or areas in the hinterland of Mosul.

muhandisīn ‘quarter of engineers’ and Ḥayy al-kafāʾāt ‘quarter of qualifications’ were named according to their residents who practise these professions.

6.6.1.3 Number of speakers sampled

Llamas (2007b, pp. 13-14) points out that managing data is one of the main considerations when it comes to deciding the sample size required for a sociolinguistic study. Because of this fact, she highlights that it becomes infeasible to account for all eligible social parameters. This is because speakers have their individual linguistic particularities and these, in turn, do not apply to everyone in their community. According to some linguists, a number in the region of three to six speakers reflecting the age cohorts intended for the study can be recorded (Tagliamonte, 2006, p. 31). Watt (1998, p. 131) notes that a number like this[117] is reasonable in terms of collection and analysis. Meyerhoff and Schleef (2010) find that five or six individuals per each factor are enough to draw generalisations about the data from a solid statistical perspective.

In the current study, five speakers per age and gender subcategory were recruited for this study. This totalled 30 speakers who were all born and brought up in Mosul and had recently come to the United Kingdom to either study or otherwise. The sample was divided into 15 speakers for each category, males and females and it represents three life stages: youth (18-30), middle-aged (31-45) and old (55+). Five speakers were selected per age cohort per gender category.

Social class was equally divided by the whole sample 15 MC and 15 LMC. For this particular sampling, a number of considerations were taken into account. Firstly, Llamas (2007b, pp. 13-14) notes that the sample would double with each category added to the design and this brings time and effort manageability into consideration. Buchstaller and Khattab (2014, p. 84) provide examples of how assembling the sample size remains amenable to financial and time considerations. They (ibid.) also highlight another concern in this regard that is the level of detail measured in the analysis, which will obviously play a role here as well. A good example can be found in acoustic analyses, which deal with realisations as points along an acoustic continuum. This is to allow for capturing fine-grained measurements such as duration as well as subtle differences in realisation. This process is time-consuming if done manually rather than using automatic methods and is particularly more so if a substantial amount of data is involved in the analysis. As the current study analyses four variables with two of them are vocalic variables being analysed acoustically, the above considerations were taken into

[117] He actually recruited four speakers for each category.

account for the sampling pertaining to class. Table 7 below shows a breakdown of the speaker pool sampled in the study.

Speaker	Young	Middle	Old
Males	5 (3 MC & 2 LMC)	5 (2 MC & 3 LMC)	5 (2 MC & 3 LMC)
Females	5 (3 MC & 2 LMC)	5 (2 MC & 3 LMC)	5 (2 MC & 3 LMC)

Table 7: Speaker sample in this study divided by age, gender and class.

6.6.1.4 Recruiting speakers for the study

Several sampling techniques have been used in the sociolinguistic literature. Two of the most common methods are random sampling and judgement sampling. Milroy and Gordon (2008, p. 25) note that the random sampling technique involves randomly selecting subjects from a ready-made list such as a phone book or the electoral roll of the community. They also note that this method may result in some sort of partiality as it often overlooks those who, for instance, ineligible to vote. Researchers (e.g. Meyerhoff *et al.*, 2015; Schilling, 2013; Tagliamonte, 2006) agree that this method is rarely used in sociolinguistic studies.

The other more familiar technique is judgement sampling. Schilling (2013, p. 35) remarks that although random sampling is useful in tackling certain types of questions in sociolinguistics, the judgment technique appears to be more effective and is thus widely used in the field. Tagliamonte (2006, p. 23) suggests that there are two main things that the researcher should do in this type of sampling. Firstly, they need to initially define and locate the informants they want to investigate. Secondly, they need to recruit an adequate number of these informants. The informants should meet the criteria set forth for the sample.

Friend of a friend

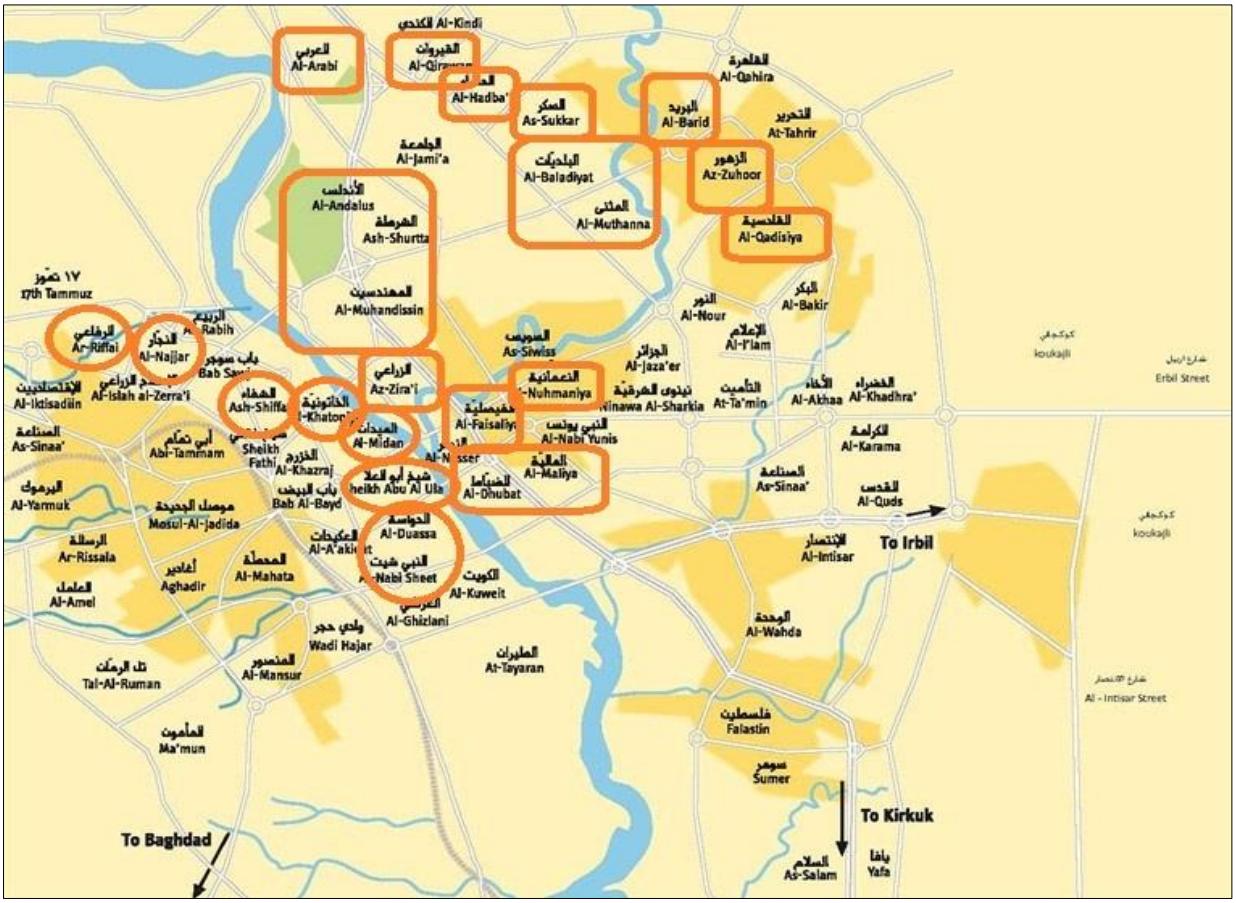
As this study targets particular participants from Mosul (i.e. *qīqu*/*qḥāḥ* people) according to certain criteria, the speaker sample was assembled using judgment sampling technique employing the widely used ‘friend of a friend’ or ‘snowball sampling’ technique (Milroy, 1980). Milroy reasons that the friend of a friend approach effectively facilitates recruiting a sample of speakers and is of an important role in the field of sociolinguistics. Britain (1997a) and Tagliamonte (2006) agree with Milroy and assert that this method has been very fruitful in sociolinguistic research citing a number of studies that adopted it. In this method, the

fieldworker approaches an individual[118] who has an insider's knowledge and acquaintance with the community. This makes it practical and convenient to locate and or suggest suitable informants who meet the criteria of designing the sample. These informants can then approach their friends, to the friends of these friends and so on until the sample snowballs into the desired number of speakers.

I asked my existing Maṣlāwi contacts[119] to identify a number of suitable informants for the study. My contacts initially put me in contact with these informants who in turn paired me up with eligible friends and/or members of their families. This technique proved effective as it helped dispel any suspicion or formality that might otherwise affect informant selection and recording. The participation of family members or friends encouraged other friends to follow suit and probably ensured a higher success rate for interview requests than the interviewer would have achieved if he had approached people on his own. However, the process of recruiting informants was not without issues. For instance, recruiting the desired number of female participants proved, at times, a hard task to fulfil. This was largely due to cultural considerations that stress the importance of modesty as a core value of the community. This makes contact with women not straightforward. This issue is also often reported in other studies (e.g. Al-Rojaie, 2013) of Arabic dialects due to the same considerations.

All the recruited speakers come from areas where MA is spoken[120] and these are clustered around the centre area, which covers parts on each side of the city (see Map 6). The areas located on the Right Bank are surrounded by Mosul's historic old gates. Some of the neighbourhoods in Mosul are named after those old gates such as Bāb al-ṭōb, Bāb ʿaġāq, Bāb al-bēḍ and Bāb lagaš. The Right Bank includes other MA-speaking neighbourhoods such as Dawwāsi, Nabi Šīt and Šēx Fatḥi. On the Left Bank, MA-speaking neighbourhoods include Fayṣaliyya, Ḥayy al-muhandisīn, Ḥayy al-ǧāmiʿa and Nabi Yūnis.

[118] Largely a member of the same community.
[119] Since I am not Maṣlāwi myself.
[120] i.e. areas where *qīqu*/*qḥāḥ* people live. The other areas of Mosul are inhabited by either people of other ethnicities or Arabs of Bedouin origins (i.e. locally known as *ǧaryāwis*).



Map 6: MA-speaking neighbourhoods of Mosul.

6.7 Fieldwork and elicitation methods

The studies on variation and change have furnished us with a number of elicitation methods to capture aspects of linguistic and, most relevantly here, phonological variation. This study employs the following established techniques in eliciting the data: sociolinguistic interview, picture description and map task. In their study on the impact of using different data collection methods, Boyd *et al.* (2015) highlight that methods such as Map Task (Anderson *et al.*, 1991) and Picture Naming are also used in various sociolinguistic studies that seek to elicit naturally produced speech employing the convenience of a controlled-setting, particularly for phonetic analysis. They point out that using more than one method of collecting data is enormously beneficial to researchers doing sociolinguistic research as this helps in gathering the desired volume and type of data. In this regard, Gross and Forsberg (2015) refer to an important aspect of using these controlled-setting techniques is that they help obtain the requisite number of instances of the variables of interest, which is not guaranteed in the free style of sociolinguistic interviews.

In view of the above, map task and picture description techniques were used alongside the sociolinguistic interview to elicit naturalistic data, being the focus of this study. Other tasks

such as reading word lists, minimal pairs and passages give rise to a formal spoken style, which is not ideal for this type of sociolinguistic study (Labov, 1972a; Yaeger-Dror, 2001). As the study used the three elicitation techniques to obtain naturalistic rather than formal or careful speech, the data collected from these three techniques will be treated as a unified set in the analysis and statistical treatment in this study. The next couple of sections will shed more light on each method used.

6.7.1 Sociolinguistic interview

Kendall (2008, p. 332) notes that recording naturalistic spoken data has been influential in the various fields of linguistics. Of note here is the field of sociolinguistics in which different data elicitation techniques have been developed such as the sociolinguistic interview. This is a widely adopted technique in variationist studies. The sociolinguistic interview can be traced back to Labov's (1962) Martha Vineyard study and has been developed and modified ever since. Van Herk (2013, p. 165) remarks that this method is now considered "the gold standard" as it is employed to divert the informants' attention away from their speech while being recorded and thus naturalistic speech is obtained. As regards the length of the interview, Labov (1984, p. 32) suggests recording a stretch of talk lasting "from one to two hours from each speaker". However, Milroy and Gordon (2008, p. 58) note that there has been no clear-cut opinion on how long an interview should last as this depends on the nature of the research questions involved. For phonological purposes, they point out that about half an hour is enough to get a good amount of instances. However, more than this period might be needed if the researcher is interested in capturing how their forms oscillate during the interview.

6.7.1.1 Structure and procedures of the sociolinguistic interview

One of the valuable accounts on structuring a sociolinguistic interview is provided by Tagliamonte (2006). I largely draw on this work in presenting the following discussion as well as in designing and conducting the actual structure of the sociolinguistic interviews I used in the study. Tagliamonte (2006, p. 39) points out that a typical sociolinguistic interview is composed of 'conversational modules', which are a set of thematic questions used in the sociolinguistic interview (Labov, 1984, p. 32). Providing some examples, Tagliamonte (2006, p. 39) notes that a researcher may employ a range of modules on, e.g. demography and the type of community and may then proceed into more personal areas such as relationships, aspirations and so on. These questions help the interviewer to assess what their informants prefer to discuss so that the conversation progresses into more topics seamlessly. This, in turn, helps in providing a bespoke environment for the participant. Researchers recommend no rule

of thumb in ordering these modules as the interviewer may order these modules during the conversation so that it moves on seamlessly. Tagliamonte (2006, p. 40) refers to an important element of using modules is to include some questions about the community being investigated. These need to be adapted in a way that reflects the peculiarities of that community.

6.7.1.2 Topics used in the sociolinguistic interview

As discussed above, the researcher should prepare a number of topics to stimulate an adequate conversation. Since this study seeks to elicit as most realistic speech from the speakers as possible, I developed a number of topics using a range of open-ended questions while yes/no questions were avoided. This type of open-ended questions prompt tales, recounts of experiences and events and thus extended periods of speech with plentiful speech forms are obtained (Milroy and Gordon, 2008, p. 55; Tagliamonte, 2006, pp. 39-42). Topics included — but were not limited to — the participant's days in school/university in Mosul, childhood games, picnics and other related introductory topics. These brought back recollections of childhood memories and paved the way for developing other general topics depending on what the individual could relate of events/experiences they went through. A useful procedure taken here is the use of 'tangential shifts' (Labov, 1984, p. 37) in which the subject is given the freedom to shift the conversation onto things they wish to talk about.

With the above in mind, some of the topics centred on the renowned Maṣlāwi cuisine and other cultural and social aspects of Mosul life (e.g. Ramaḍān). An informal and undisturbed atmosphere was comparably maintained across interviews. One of the main topics was on the wartime memories the participants have had in Mosul. This helped obtain some stories related to death and danger the individuals and/or their relatives experienced during the wars that involved Iraq. Using death-related topics is one of the key strategies that researchers use to divert the participants' attention away from being recorded. Previous research employing this type of question has shown that such a topic can successfully get the speakers engaged in interaction especially when they get emotionally immersed in their narrating of the events. This type of questions help direct the informants' focus towards the content of what they say rather than the way they are saying it (Labov, 1972a, p. 92; Milroy and Gordon, 2008, p. 65). Labov (1984, p. 33) notes that this type of questions has long been successful in sociolinguistic interviews.

Indeed, the informants in the current study produced long stretches of the topics they talked about or the anecdotes they recalled. One of the death-related examples that my participants

recalled came from participant 'Niḍāl'[121]. She recalled how an air raid siren went off while she was in school during the Iran-Iraq war in the 1980s and how the students heard the sirens' wailing sound and were then rushed terrified to makeshift shelters while aircraft were bombing the city. Some of the narratives told in this study had the added advantage of giving an insider account of past social and political events that occurred in Mosul over the past decades. One of my old-age speakers, 'Ehāb', recalled what he remembered of the chaotic events in the 1950s in Mosul and how those events had an effect on Maṣlāwis' attitude towards political affairs.

One last thing worth mentioning here is that Labov (1984, p. 40) points out that the interviewer should give the impression he or she is 'a learner' during the interview. In conducting the sociolinguistic interviews, I ensured that there was little interference or involvement on the part of the interviewer throughout the interview. However, there were cases of positive back-channelling and some questions to elaborate or clarify and to keep the discussion going, where possible.

6.7.2 Other elicitation techniques

Schilling (2013, p. 106) notes that although the sociolinguistic interview proved its feasibility, it may not secure obtaining the type of linguistic output we are interested in. This is due to the participants being free to their choice of using whatever they wish of forms in the conversation. They may not produce an adequate number of tokens of target variables so that one can quantitatively deduce a pattern. Therefore, to reduce the limitations this technique might have, the sociolinguistic interview is usually supplemented by other techniques of a rather controlled setting. This would ensure supplementing their data with enough tokens of the variables of interest. In view of this, two other types of elicitation methods in the variationist tradition along with the sociolinguistic interview were adopted. The same friendly informal atmosphere of the sociolinguistic interview was also used. These methods are the picture description task and map task.

Map Task

The map task method is one of the commonly used methods in linguistic tradition to collect data is the map task. A number of studies (e.g.Barras *et al.*, 2007; Hilton, 2010; Taqi, 2010; Williams and Kerswill, 1999a) have used this method in eliciting data for sociolinguistic research. In this method, two participants (often the interviewer and the interviewee)

[121] The names used here are pseudonyms. This is in line with the speakers' wish to remain anonymously mentioned, particularly women, in the study.

collaborate in a dialogue to reach a target (or more) on a 'treasure hunt' map (Brown, 1996). Clopper (2013, p. 152) points out that this kind of tasks produces many instances of the target variables. A map task involves two participants holding versions of the same map. The first participant's map shows some landmarks, roads, etc., while the second participant's map lacks some of these. Lüpke (2009, p. 79) points out that an advantage of this method is that researchers can modify it to suit their aims such as obtaining specific linguistic units.

In the current study, certain modifications to the typical design and implementation of the map task technique were applied to better serve the needs of this study. These can be summarised as follows:

a) The researcher had a lesser participation in the task and his role was restricted to, as minimally as possible, initiating and directing the discussion, where applicable.

b) Specific maps were used for the map task in this study[122]:

i) A map of Mosul was presented to the participants to locate landmarks and demarcate the neighbourhoods and their boundaries as well as streets, etc. they know.

ii) A map of Mosul with objects that contain certain targets related to the variables under study. These targets included important places such as streets, attractions, administrative buildings, cultural institutions, etc.

The task was explained and the maps were presented individually for each informant. I put into consideration that not all participants may be familiar with using maps. Therefore, the informants were asked to familiarise themselves with the maps and were told that this was not to test their geography knowledge. This procedure served to ease any pressure or embarrassment they may have. Different questions were asked such as 'where is the nearest landmark to your home?', 'What is it called in Mosul?', 'Are there any other landmarks/points of interest nearby?' and 'How can one get from your area of living to the city centre?'.

The interaction between the participants (i.e. the informant and the interviewer) was designed in a way to obtain as much carefree speech as possible. The rationale for choosing these maps was that the familiarity with the maps would enable the participants to conveniently discuss and interact with the information provided and produce as much natural speech as possible. Indeed, the maps of Mosul proved successful during the map tasks I carried out for this research. These maps generated longer local stories from the participants than simply locating objects on the maps. To give an example, one of my informants, while discussing a map of

[122] For a look at these maps, see Appendix A.

Mosul's streets and neighbourhoods, recalled some memories of his past daily job as a taxi driver mentioning some details on where and when those memories occurred to him.

Picture Description/naming

Another data collection technique used in the variationist research is the picture description task. A typical picture description task involves providing participants with a series of pictures to describe and comment on. In this technique, the researcher uses pictures to elicit certain linguistic features of interest (Rebuschat and Mackey, 2013). The task employed in this study included a full set of thematically related pictures (some of them centred on Mosul) that contained objects having target sounds. The target sounds were distributed randomly across the pictures without writing them down. Some of the pictures contained more than one object and some of the target words in the pictures contained more than one variable. This was to fulfil two functions: first, to help elicit a natural production since writing words would dictate a certain way of pronunciation on the part of the participants; second, to prevent the participants from observing any patterns, at least, in terms of sounds. This helped to produce the target sounds without being noticed what sounds were sought after. The researcher was in control of moving on to the next picture after making sure that the speaker had produced the target variable(s) in the discussion of the picture.

Some of the pictures had a story behind them; therefore, the informants freely recounted what they knew about the pictures. This type of pictures was constructed in a way that the participants not only produced the desired linguistic output but also provided useful extralinguistic information. This proved an added bonus of this method as this type of information could be utilised in interpreting the linguistic behaviour of MA. Indeed, the introduction of local pictures proved effective in generating insightful subdiscussions for the study. For instance, some participants gave insights on Mosul's cultural and social aspects while discussing some pictures of a specific event or an era of Mosul. One such a picture was about marriage (See Appendix C for a sample) whereby participants went on to describe Mosul's tradition of endogamy (discussed earlier in section 6.6).

6.7.3 Recording setup

The recordings were conducted in two settings: home and lab sessions. The next two sections give more detail on these two types of sessions.

6.7.3.1 Home sessions

These recordings were carried out inside the participants' own homes in Manchester, Leeds, Loughborough and Newcastle, UK. The speakers were briefed on the nature of the process of recording without exposing the aim of the study, which was done after all the sessions had been completed[123]. Using the techniques and topics detailed earlier, the recordings were conducted in noise-free environments in the informants' homes. For this purpose, a small room was used and this was equipped with soft surface items and furnishings (e.g. curtains), which can help reduce echo sounds. The recordings were made straight to digital at a sample rate of 44.1 kHz with a 16-bit resolution. The recording device used in this was a portable Edirol R-09HR High-Resolution recorder equipped with an Edirol CS-50 condenser microphone placed on a desk in front of the subjects[124].

6.7.3.2 Lab sessions

Some Newcastle-based[125] informants were recorded in an audio-visual laboratory at Newcastle University. The microphone used in these lab sessions was a Neuman U87, which was fed into a Total Audio Concepts Scorpion mixing desk. Audio recordings were set 16-bit 44.1 at KHz sample rate. The exact length of the sessions varied with each speaker. However, it was ensured that the sessions lasted for approximately one hour or a little longer, as long as the speakers could comfortably get on with the interview and the topics discussed.

6.7.4 Gaining informed consent

In accordance with the ethical guidelines laid out by Newcastle University, I obtained informed consent from each participant certifying that they were aware of what this participation involves prior to taking part in it[126].

6.8 Processing and analysis of data

This section sets out the analyses and relevant techniques adopted in analysing and processing the dataset of this study. Acoustic, auditory and statistical analyses were conducted. Each of these analyses was conducted in several stages, which I will attend to in greater detail below. Before I move on to those, it is worth mentioning two important notions that are at the core of

[123] The participants were also briefed on their rights according to the consent form they signed (described below).
[124] Equipment was kindly provided by the IT Service in The School of Education, Communication & Language Sciences, Newcastle University.
[125] Some Newcastle-basecd participants, especially women, preferred to be recorded in their homes for some family commitments. For participants outside Newcastle, all were recorded in their homes since no recording studio was available.
[126] See Appendix B for the consent form used for this purpose.

quantitative sociolinguistics: the linguistic variable and the related 'principle of accountability'. Tagliamonte (2006, p. 70) notes that the linguistic variable is the "most fundamental construct in variation analysis". As Labov (1972a, p. 8) puts it, a linguistic variable is "two or more ways of saying the same thing". For example, /k/ in Iraqi Arabic is variably affricated. It can be pronounced as voiceless velar plosive [k] or an affricate [tʃ] as in /kaːn/ → [kaːn] or [tʃaːn] 'was'. Other variables such as vowels have more than a binary set of variants as we will see later in this study. Related to the linguistic variable is the principle of accountability (Labov, 1972a, p. 72), which holds that the researcher should take into account all the tokens of a variable rather than just the most frequent or typical ones. This is to adequately capture the full range of variability of linguistic variables, which can then be factored in the analysis. Tagliamonte (2006, pp. 12-13) highlights this principle stating:

> In variation analysis, accountability is defined by the 'principle of accountability', which holds that every variant that is part of the variable context, whether the variants are realised or unrealised elements in the system, must be taken into account. In other words, you cannot simply study the forms that are new, interesting, unusual or non-standard…You must also study the forms with which such features vary in all the contexts in which either of them would have been possible…….An accountable analysis demands of the analyst an exhaustive report for every case in which a variable element occurs out of the total number of environments where the variable element could have occurred.

6.8.1 Auditory analysis

I conducted an initial listening to the data and this was to fulfil two functions: first, to get an overview of the data taking note of any interesting aspects prior to performing the analysis; second, to get an idea on the variable contexts as well as the range of variants therein. Circumscribing the variable context is one of the crucial steps of any quantitative analysis of linguistic variation. Walker (2014, p. 442) notes that this is "most important analytical decision" a research would take as it has an impact on a number of related analytical aspects such as extracting and quantifying instances as well as interpreting the findings emerging from the analysis.

To account for the principle of accountability, I ensured that all the different variants were appropriately represented within the analysis. An auditory analysis of all informants was performed to code their realisations of the variables selected for the analysis. Every token was assigned to one of the phonetic variants and coded for each relevant linguistic and non-linguistic factor assessed in this study. In view of previous descriptions in the literature and the research questions raised in this study, the tokens were coded for age, gender, social class

and (where relevant) the following linguistic factors: part of speech, stress, environment and preceding and/or following sound. A fuller description of these factors will be provided in each relevant chapter dedicated to the variables.

The consonantal variables were analysed auditorily as determining the distinction between the variants was unproblematic given that these variables have discrete variants. However, the tokens were also inspected instrumentally to support the auditory analysis. For this purpose, I used the latest version (6035: 64-bit edition) of Praat open-source freeware phonetic analysis software (Boersma and Weenink, 2017). The use of Praat helped in locating and confirming observations not easily discernible through mere listening. Foulkes and Docherty (2006) demonstrate that using instrumental techniques can reveal things often undetectable via crude impressionistic measurements. To take an example from my data, some rhotic variants produced were neither an apical nor a uvular production. Rather, the auditory analysis shows that many instances of this variable were actually vocalised. To validate this observation, these instances were verified instrumentally using Praat.

6.8.2 Acoustic analysis

Thomas (2010, p. 145) notes that analysing vocalic differences has been pivotal in the research on language variation. Early scholars of dialect geography implemented impressionistic methods in transcribing dialect pronunciations. This was also standard practice for many sociolinguists who used similar impressionistic methods, albeit to a lesser extent in terms of detail (ibid.). However, although acoustic techniques are more time-consuming than impressionistic analysis, they have contributed to enhancing the accuracy of research of linguistic variability and change (Baranowski, 2013). Thomas (2010, p. 145) remarks that acoustic tools help produce far less subjective measurements that often emerge from impressionistic techniques. The vocalic variables in this study were analysed acoustically with the first dimension measured for the vowels was duration. Thomas (2010, p. 139) remarks that researchers normally start with measuring duration before other acoustic dimensions as it is relatively more straightforward to measure. This measurement is obtained by marking the temporal distance between the onset and offset of the vowel. The former refers to the temporal point at which the production of the vocalic segment begins. The offset, on the other hand, marks the end of the vowel as indicated by the point that signals the end of the shift to the following sound (ibid.). Thomas explains that although it is sometimes not straightforward to determine the onset and offset of a vocalic segment, a number of key indicators can be used to determine these depending on the sounds involved in the token. The other dimensions measured for the vowels in this study are the first two formants of each

vowel extracted. The next section on segmenting below will deal with these segmenting-related issues with examples from the data of this study.

6.8.2.1 Segmenting

Segmentation of speech sounds is one of the frequently performed preliminaries that are necessary for analysing different phonetic aspects (Hewlett and Beck, 2013). To facilitate the acoustic analysis, the tokens coded for the vocalic variables were segmented and annotated using a Praat script that produced duration as well as two formant measurements (F1, F2) for each segmented token. In this process, auditory and visual information was taken into consideration as an aid to deciding the start and end boundaries of each target vocalic segment in light of the guidance provided by Thomas (2010)[127] and some other works (presented below) on placing the boundaries between the specific sounds surrounding the vowel.

The boundaries between the vowels and the neighbouring segments were manually placed in Praat using visual inspection of wideband spectrograms and waveforms as well as auditory verification. The vowel onset and offset were taken to be the points at which the periodicity of the vowel starts and ends respectively and these points were identified on the basis of the sound that precedes and or follows the vocalic segment of interest. For instance, in stop consonants, the first vocalic voicing pulse was identified as the onset of the vowel after the end of the release burst for a stop consonant. The vowel offset was identified as the end of the periodicity and the beginning of the closure period of the stop. Almbark (2008, p. 15) notes that voiced plosives in Arabic show a negative voicing lead before voice onset time (i.e. VOT). In fact, previous research on VOT in Arabic dialects has shown some dialectal variation. This variation is highlighted in a number of studies (e.g. Alghamdi, 1990; Bellem, 2011; Flege and Port, 1981; Heselwood, 1996). Assessing data from Cairene and Baghdadi Arabic, Heselwood (1996) found that voiceless [t] and [tˁ] in Baghdadi Arabic display a short positive voicing lag. Although we lack research on *qeltu*, general lines from previous works on Arabic dialects on how to demarcate relevant issues in segmenting can still be handy. Therefore, the boundary of the vowel offset was placed before the start of this lead of the following voiced stop consonant. Figure 2 below shows an example in the word /ħduːd/ ‘borders’ where we can see the boundary was placed immediately before the first pulse of the vowel and after the release phase of /d/ preceded by the lead.

[127] Thomas (2010) explains different ways of making measurements of vowel duration and quality identifying portions of the speech signal or spectrogram that could inform researchers’ decisions in terms of choosing what and how, to measure these aspects.

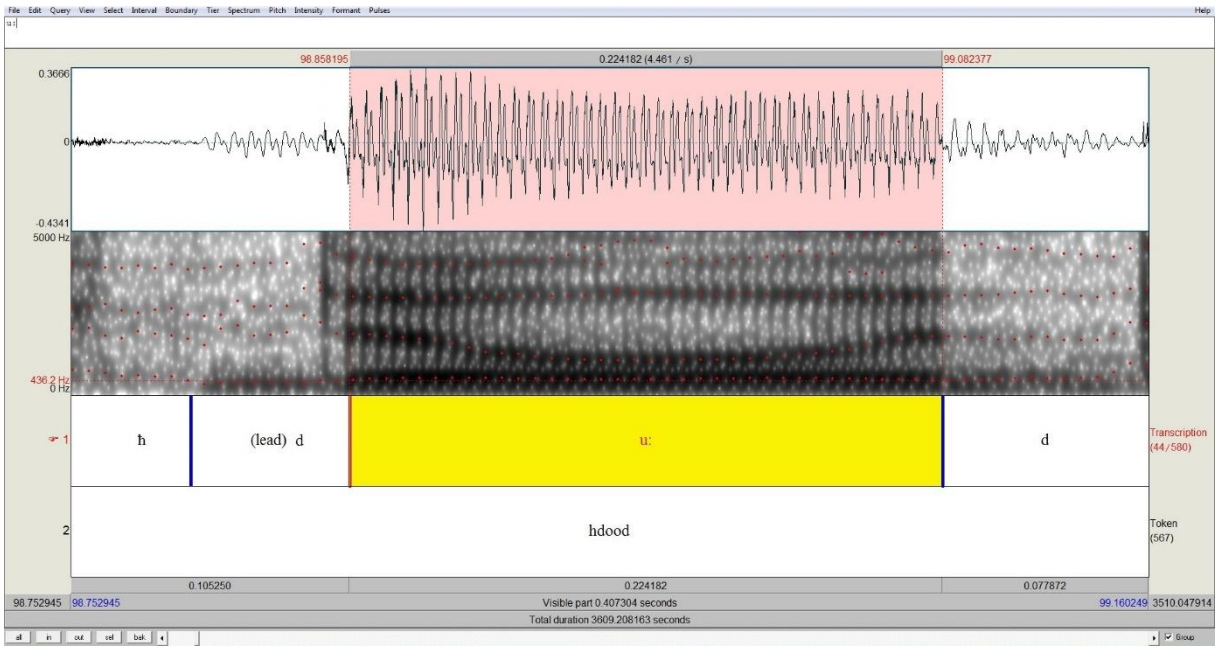


Figure 2: The production of the word [ħduːd] *by a Maṣlāwi speaker with the boundaries between the vocalic segment and voiced stop consonant.*

For vowels preceded by voiceless fricatives, the vowel onset was identified as a clear rise in amplitude from the end of the aperiodic energy of the fricative sound preceding the periodicity of the vowel. By the same token, when the vowel was followed by a voiceless fricative, the vowel offset was taken as the end of the periodic waveform of the vowel and beginning of the aperiodic energy of the fricative consonant. Al-Tamimi and Khattab (2015, p. 374) note that the offset of the vowel segment can be seen as a clear decrease in amplitude and a dramatic change (or complete absence) in the formant structure of the vowel.

In many cases, this was made easier when word-final vocalic segments were followed by a pause. An example of a token that contains a voiceless fricative preceded by a vowel can be illustrated in Figure 3 below, which displays the production of the word [manfoːx] ‘blown’. The vowel can be easily detected from the neighbouring aperiodic energy (highlighted in red lines and arrows) of the fricatives [f] and [x]. It can also be seen that the formant structure in the spectrogram is also clear for the vowels compared to that of the two neighbouring sounds.

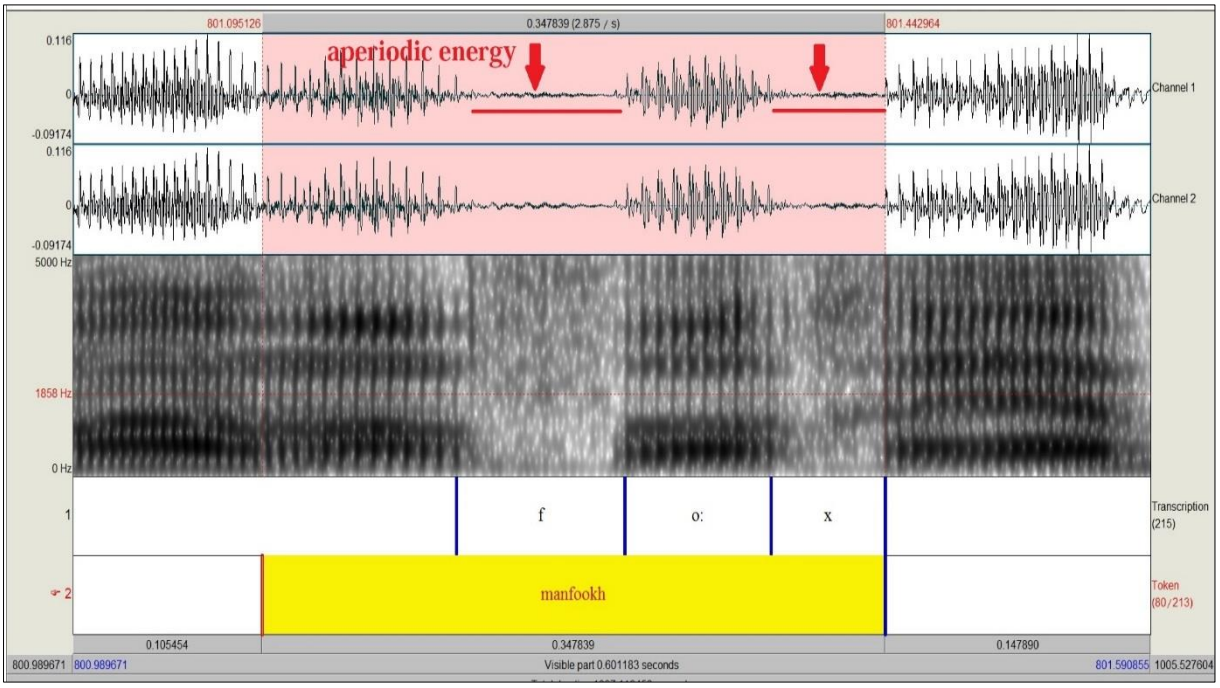


Figure 3: The production of the word [manfoːx] by a Maṣlāwi speaker with the boundaries between the vowel [oː] and the preceding and following voiceless fricative consonants.

The voiced pharyngeal fricative /ʕ/ has a formant structure that is often similar to that of a following vowel segment and can almost be continuous with such a segment (Johnson, 2003). Therefore, the offset of friction for this sound was identified as the point at which a relative rise in the intensity could be seen, which indicates the onset of the vowel. This point corresponds to a shift from the intensity of fricative sound towards the relatively higher intensity of the neighbouring vowel. For preceding nasals, the boundary was placed at the onset of the first voicing pulse of the vowel after the end of the amplitude of the nasal consonant, which tends to be lower than that of vowels. Nasal consonants also show antiformants, which appear as white bands on the spectrogram and result from resonances of the nasal cavity (Harrington, 2010, p. 114). These are not present or are much reduced in non-nasalised vowels, which provides another cue to the onset of the vowel.

The first 5-7 minutes of every conversation were disregarded from the analysis. Drummond (2010, p. 87) notes that by this period of time of a recording, informants acclimate to the conversation and thus their attention to the recording process tails off. Acoustic measurements for the formants were applied at the midpoint portion of each token. The rationale behind this was to reduce any influence from a neighbouring segment. Klatt and Klatt (1990, p. 829) note that the vowel at this point would be minimally influenced by neighbouring sounds. Thomas (2010, p. 148) explains that in this stable period of the vowel, the formant structure exhibits discernible cues related to the vowel.

After concluding the segmenting, all tokens were manually checked. To add a further layer of verification, approximately 30% of the segmented data were double-checked by a second rater[128] who confirmed the validity of 96% the measurements and suggested changes for the remaining 4%. A meeting with the second rater was held to arrive at an agreement on where the boundaries should be put.[129] After plotting the vowels, it was noticed that there were tokens with extremely high formant values. Those were measured manually while all other vowel measurements were re-examined by the author to verify their values and to ensure no errors or misidentified formant and duration measurements remained. The measurements resulting from this task were then transferred to an Excel spreadsheet for coding in preparation for the statistical analysis. Full details on the coding protocol used for each variable in the study are provided in their dedicated chapters. The extracted measurements were subjected to normalisation, which is discussed in the next section.

6.8.2.2 Normalisation

Normalisation of vowel formant data is standard practice in sociolinguistic research. Thomas (2002, p. 160) notes that normalisation is an essential procedure, particularly in making "meaningful linguistic and sociolinguistic comparisons" between the formant values of the different speakers whose vowels are acoustically assessed. Meyerhoff *et al.* (2015, p. 124) remark that sociolinguistic research is interested in eliminating the vowel formant differences that are ascribable to anatomical differences of the vocal tract between speakers while preserving the sociolinguistic ones. In this sense, speech differences observed between male and female speakers in a study would be the result of gender-based sociolinguistic behaviour rather than of the anatomical differences between them for having different-sized vocal tracts (Labov, 2001, pp. 157-158). Therefore, for a sociolinguistic study, the aim of normalisation is minimising these anatomical differences, which can affect formant resonances.

There are different methods of normalisation available to researchers. Each method has its own merits and shortcomings[130]. Flynn and Foulkes (2011) note that vowel normalisation is becoming increasingly important given the accuracy it offers in comparing formant values across different speakers. It has also become available to many scholars to perform through the online normalisation suite NORM (ibid.). However, they point out there is no consensus

[128] A colleague who is an Arabic-speaking PhD student and works on a topic on MA that involves acoustic analysis techniques, not least segmenting.
[129] At the start of the acoustic analysis, I also had the privilege of consulting an academic member of staff who is a native speaker of Arabic and works on acoustic phonetics. We both discussed and agreed on how to deal with some tricky issues that might arise on where to put the boundaries and other related issues. Both scholars involved in segmenting are acknowledged for their effort.
[130] Flynn (2011) reviews several of these comparing the results of each method he tested.

on the best way to perform this process. Thomas (2002, p. 174) reasons that it remains to the researcher to decide which method is best for their data. In this respect, he (ibid.) notes the following:

> All normalisation techniques have drawbacks, choosing which normalisation technique to use is a matter of deciding which drawbacks are tolerable for the study at hand. The onus, then, appears to be on the researcher to choose from the numerous posited methods, a normalisation procedure that is appropriate for the type of study and its research objectives.

6.8.2.3 The method used in this study

Vowel formant data were normalised using Labov's Telsur method. This was operationalised in the NORM Suite online resource[131] (Thomas *et al.*, 2007). Labov's Telsur method[132] is a modification of Nearey's and fared better than other methods tested in producing undistorted data and in preserving sociolinguistic variation. Other common methods such as Watt and Fabricius also require accounting for all the corners of the vowel envelope, which could not be done for this study as not all those vowels were included in the study. Telsur uses the log mean to normalise a formant and calculates a single grand mean for the speakers of the study.

6.8.3 Statistical analysis

Grieve (2012, p. 251) points out that variationist sociolinguistics has been one of the first linguistic strands that employed quantitative methods for analysing speech data. He cites a number of early main studies (e.g. Fischer, 1958; Labov, 1963, 1966; Wolfram, 1969) that pioneered this method in sociolinguistic research.

After analysing, coding, segmenting and normalising the data, the extracted data were also treated statistically. The statistical analysis was used to assess the frequency and the distribution of linguistic variables across the set of parameters that are hypothesised to condition them. In sociolinguistic research, variationist analysis seeks to assess the effect(s) of independent variables (linguistic and/or extra-linguistic) on the production of a particular dependent (response) variable. This can be conducted by running regression modelling, which allows assessing the relationship between these two groups of variables.

In the current study, mixed-effect regression models were performed. This type of analysis is now highly recommended for variationist research (Johnson, 2009; Tagliamonte, 2012). It allows researchers to assess linguistic variability in terms of fixed effects and random effects.

[131] NORM is a software with a web-based interface of the VOWELS R package. NORM provides a number of major normalisation methods to use and quickly compare the results obtained. It works by processing a spreadsheet of raw vowel measurements through the normalisation technique of choice.
[132] For a comparative survey on this and other methods, see Adank et al. (2004) and Flynn (2011).

Fixed effects are those factors that can be replicated, i.e. that can be applied to all the speaker community. These factors have a relatively limited number of possible subcategories, or 'levels'. For example, gender can be divided into two levels: male and female. Other fixed predictors include age, class and linguistic context. Random effects refer to the factors with a wide distribution (such as individual speakers or words). These factors cannot be typically replicated across speakers in that, for example, not all the words will be similarly distributed across all the speakers (Tagliamonte, 2011, p. 137). Johnson (2009, p. 365) highlights that some individual speakers may (or not) use a particular realisation of the variable to a certain degree that the relevant fixed predictors (e.g. gender, age and class) would fail to reveal. Therefore, incorporating random factors would capture the relative contribution of the fixed factors "but only when they are strong enough to rise above the inter-speaker variation" (ibid.). Kendall (2013, p. 55) points out that treating random effects that way would permit more accurate models.

The mixed-effect regression models for vowels were performed using Rbrul[133]. This statistical program works within the statistical platform of R and allows for the use of mixed-effect modelling described above. Rbrul runs a stepwise regression to find the best model for the predictors included. To do this, Rbrul runs two subanalyses: step-up and step-down. In this process, predictors (factors) are entered successively so that a string of models are built. Rbrul then compares between the consecutively created models to determine the one that significantly improves the explanation of the data showing in the process any significant interactions between predictors. In the step-up procedure, Rbrul adds predictors to the model separately starting with the predictor that has the highest effect on the response until no more significant predictors remain to be added to improve the model. In the step-down, Rbrul tries to create the full model (with any significant predictors reported) and then eliminates those predictors that do not improve the model (i.e. insignificant predictors). If both step-up and step-down procedures match, then this means the best model has been obtained[134]. The coded dataset for each variable was imported into Rbrul in Microsoft Excel spreadsheets converted

[133] Regression models directly through R were also considered in implementing the statistical modelling for vowels as is the case with the consonantal variables in this study. However, it was decided to use Rbrul for the vowels rather than R since the latter produced outputs with errors citing too many factors incorporated in the design to deal with while the former coped well with the factors and their levels in producing the regression analysis. Thus, reaching the best-fit model for each variable using R appeared to be not possible. The analysis of the vowels was then conducted using Rbrul, which is also a common way of handling statistical regression modelling.

[134] Special thanks are due to the author of this tool (Daniel Ezra Johnson) who kindly helped in this process by commenting and explaining a number of related aspects pertaining to Rbrul. There are a number of guides and documents on this tool. Of particular value is Agata Daleszynska's guide (Daleszynska, 2011), which came in handy in performing Rbrul runs.

into comma or tab-delimited format. The details of each model are given in the relevant chapters.

For the consonants in this study, logistic regression using R[135] was performed. This is used to assess variables with binary outcomes (e.g. consonant). However, if the categorical variable involves more than two discrete variants, it would be suitable to use a multinomial model (Gorman and Johnson, 2013, p. 226). This study follows this practice in employing logistic regression analysis using R to test for one consonant variable, which displays more than two variants, as we will see later. More detail on both, Rbrul and R models will be provided in the relevant subsequent chapters.

This chapter has detailed the methods used in conducting the study with the steps taken and the techniques employed in collecting, processing and analysing the data. The decisions, whether those pertaining to the choice of the methods and techniques or otherwise, have been explained and justified. With the target community identified and the phonological variables and the methods used in analysing them are all in place, I move now to each phonological variable in turn. The next chapter deals with the analysis of the rhotic variable. This chapter is the first of four chapters dedicated to the four phonological variables intended for analysis in this study.

[135] Rbrul is not built to deal with multinomial variables unless the levels of variables are collapsed into a binary format, which may run the risk of inflating the results and leads to meaningless outcomes. Therefore, it was decided to use R, which can deal with this type of variables.

Chapter Seven: The Rhotic variable

7.1 Introduction

This chapter concerns the realisation of the rhotic variable in MA. It accounts for the interplay between the linguistic and social factors in conditioning its variability. This will enable us to obtain a linguistic and social profile of the variable while providing new insights, although of course by no means complete, on related aspects previously unreported in the literature.

Chief among the objectives in this chapter is to assess if this variable is undergoing a change in Mosul and how this change patterns linguistically and socially. Examining the distribution of this variable across age cohorts will identify whether it is undergoing such a change. It is expected that a change toward *gelet* is in operation as regards this variable in MA. Particularly, it is expected to find an increase in the use of the supralocal apical form at the expense of the traditional uvular one. The next section gives an overview of this variable.

7.2 An overview of the variable

This variable has been one of the important dialectal features in Iraqi Arabic. The different forms of this variable serve as differentiating features between *gelet* and *qeltu*. Notably, the apical form of *gelet* and the uvular one of *qeltu* are central to this differentiation. Uvular realisations of /r/ have been attested in many language families such as Semitic, Germanic and Romance languages. Arabic is one of the languages that exhibit a uvular realisation, albeit only in certain dialects. One of the dialects showing this type of realisation is Iraqi Arabic and particularly the *qeltu* dialect spoken in Mosul.

The historical origins and development of the uvular realisation have been subject to debate with a number of proposals were made in this regard. A potential source cited in the literature is that it originated from a sound of Semitic origin, namely *reš*[136] (ר) of the Aramaic spoken by Iraqi Jews in the Middle Ages (Khan, 1995, p. 77). Most of the references we have on this realisation in Arabic dialects argue that it has been attested since at least the Abbasid period (750 - 1258 CE) and that it represented a speech impediment[137] and or a deviant form. The vocalised realisation was also considered a speech impediment with many scholars citing this feature as such (e.g. Al-Muṭarrizi, 1979; Al-Ṣāġāni, 1978; Al-Zamakhshari, 1998). Some of the earliest treatments known on this variable are those by Ibn Sīnā[138] (980 - 1037 CE), Sibawayh (757 - 796 CE) and al-Farāhīdi (719 - 786 CE). Al-Farāhīdi's lexicon *kitāb al-ʿayn*

[136] This variable can be pronounced as a uvular as in French and German or a trill as in Spanish (Coffin and Bolozky, 2005, p. 20).
[137] The inability to produce an apical form and, therefore, a uvular is realised instead.
[138] Also known as Avicenna in Western scholarship.

'the book of *ʿayn* or source'[139] described the pronunciation of /r/ in Arabic and its articulatory similarities with other sounds such as /n/ and /l/. These scholars agreed that the non-apical realisation (i.e. uvular) represented an irregular variant of /r/. The view of speech impediment as the source of the existence of this form, in fact, remained in many sources throughout the history of Arabic linguistic scholarship (e.g. Al-Fayyūmī, 1904; Al-Rāzi, 1938; Ibn Manzūr, 1883; Umar, 2008).

While the speech impediment remained a key interpretation as regards the uvular form, there have been some attempts at looking at it as a sound change. For example, Thwaini (2013, p. 64) notes that this dorsal realisation was common in Baghdad since the Middle Ages and that it declined in use due to a demographic and dialectal change in Baghdad while it survived in Mosul. Blanc (1964, p. 23) remarks that this realisation was first described in the ninth century by al-Jāḥiẓ (775 - 864 CE) while Ibn Sīnā did not mention its occurrence in Arabic. Al-Jāḥiẓ argued that this realisation, which he considered as a speech impediment, was mostly heard in the speech of notable people and those individuals of decent educational background (ibid.). Blanc (1964, p. 24) concludes that judging from the early references, it can be claimed that the uvular realisation of /r/ may have been a limited rather than far-reaching sound change. Blanc argues that this is evidenced by the fact that it does not exist in some *qeltu* dialects (e.g. Anatolian) at present.

The accounts we have on Mosul have largely followed the speech defect view discussed above. Aldahook (2015, p. 15) refers to an early mention of the uvular form in Mosul by the noted Baghdadi poet Abu Nuwās (756 - 814 CE). Abu Nuwas wrote a love poem for a girl he saw from Mosul. In this poem, he described the girl's uvular form as *luṯġa* [luθɣa] (a speech impairment). Faraj (1948) reviews some accounts that viewed this realisation in MA as a *luṯġa* that later became established in the dialect. However, Faraj explains that Maṣlāwis can pronounce the apical form[140] and that the uvular form is a feature of their dialect. Afandi (1882) argues that Maṣlāwis have this form out of their difficulty in pronouncing the apical variant. Zaydan (1923) goes along this line of reasoning for the presence of this feature in the speech of Mosul. There are some other accounts on this sound in Mosul, which I will deal with in the next section and then in more detail throughout the rest of this chapter.

[139] *ʿAyn* in Arabic may denote a number of meanings other than the sixteenth letter in the Arabic alphabet, pronounced /ʕ/. The title of this book is sometimes translated according to the name of the letter or the meaning of the lexeme, which also mean 'source', 'source of life' and 'soul'. See (Stetkevych, 1993, pp. 177-178) for a discussion of the semantic connotations of this lexeme with a special reference to al-Farāhīdi's work.
[140] Faraj cites a number of examples where an apical form is realised in Mosul such as personal names.

7.2.1 Previous research on the variable

Hachimi (2005, p. 94) notes that Arabic sociolinguistic research has not focused as much on this variable as on other variables such as (q). She contends that references to this variable in Arabic have mostly been done to display what variants it shows with no interest in sociolinguistic considerations. However, one of the earliest studies on this variable is Cantineau's (1960) study, which accounted for the variable in Arabic dialects, particularly those spoken in Iraq and Morocco. Hachimi (ibid.) suggests that this scarcity of studies on the rhotic variable is probably because it shows little socially stratified variability in Arabic dialects. While this view may be plausible in some areas, it is nevertheless not applicable to everywhere in the Arabic-speaking region. Given the different variants founded in Arabic dialects today and the changing sociopolitical atmosphere of the Arab society, it stands to reason that this is not the case any more and that studies are needed to assess the sociolinguistic aspects of this variable.

There are a number of accounts on this variable that have referred to the uvular form in Arabic dialects. Blanc (1964, p. 23) refers to the existence of the uvular form in Djidjelli, eastern Kabylie in Algeria as well as in other old urban cities of the Maġrib region such as Tunis, Constantine, Algiers, Meknes and Fez. Blanc (ibid.) notes that the existence of this form in those localities has also been considered by Marçais (1956) as a defect or "une maladie des villes". Cohen (1912) reported a uvular variant in the speech of the Muslim people of Algiers while an apical trill is found in the speech of their Jewish counterparts. This is, in fact, the opposite of what we have in Baghdad where non-Muslim communities have the uvular form.

Mosul provides a good testing ground for investigating this variable as it possesses its own traditional variants that differentiate it from other Iraqi Arabic dialects. There is also an added incentive for such an investigation in that we lack previous research on its variation and change. Thanoon's (2010) study dedicated a chapter on the description of this variable in Mosul. We also have an unpublished master's dissertation by Aldahook (2015) in which he investigates the reflexes of this variable to argue against the view that the uvular variant is a speech impediment. This study also gives a historical overview of this variable in Mosul. There is also another study by Tawfiq (2010) who described this variable in Mosul from phonological and pragmatic perspectives. We also have another study on the different phonetic realisations of the variable in Iraq including Mosul (Yaseen, 2010). These studies will be reviewed over the course of this chapter.

7.2.2 Social and geographical distribution of the variable

Recall that *qeltu* dialects are divided into three further subgroups: Tigris, Euphrates and Anatolia. The traditional realisation of this variable in the Tigris group of Mesopotamian dialects is a voiced uvular fricative [ʁ] as in /raːs/ → [ʁaːs] 'head' and /ħaːr/ → [ħaːʁ] 'hot' (Blanc, 1964, p. 20). The uvular realisation is an established feature in Mosul. It is also reported in the speech of Tikrit as well as in the *qeltu* dialects spoken in Baghdad (i.e. CBA and JBA). In Baghdad, this variable serves as one of the distinguishing features that differentiate the communal dialects in that Muslims maintain the apical realisation while non-Muslims have the uvular form (Blanc, 1964, Abu Haidar, 1992). Khan (2016, p. 46) notes that the uvular realisation can be found in the dialect spoken by the Jewish community not only in Baghdad but also in some other parts of Iraq such as Mosul. Khan (ibid.) also remarks that this variant can be traced in some of the classical books written in Judeo-Arabic of medieval Iraq.

While a prominent characteristic of the Tigris group, this realisation, however, cannot be found everywhere in this group. In her study on the *qeltu* Arabic spoken in Rabīʿa[141], Abu Haidar (2004, p. 5) reports that the apical form rather than the uvular one is realised in this dialect. She cites some examples to demonstrate this use:

Mosul	**Rabīʿa**	**Gloss**
[tˤaːʁ]	[tˤaːr]	'it flew'
[ʁəħtu]	[rəħtu]	'I went'

Furthermore, uvular [ʁ] is also not a feature of *qeltu* dialects spoken in some towns on the Euphrates such as Hīt and ʿĀna.

7.2.3 Linguistic distribution of the variable

Below is an outline of the linguistic distribution of the variable gleaned from the existing literature on MA. These can be served as a benchmark against which we can then compare the results of this study.

1) According to the literature[142] on MA, Maṣlāwis realise /r/ as a uvular [ʁ] in the following places:

[141] Rabīʿa is a border town in Nineveh province.

[142] Tawfiq and Salih provide examples only for MA. The transcriptions of these examples are theirs too although they use some different conventions such as [y] rather than [j] for the voiced palatal approximant. Where relevant, I provide the equivalent realisations in *gelet* for comparison.

a) A uvular realisation is most likely produced when the /r/ phoneme is preceded or followed by a long vowel (Salih, 1972, p. 69), as in the following examples:

Gelet	**MA**	**Gloss**
[kθiːr]	[kθiːʁ]	'much'
[ħmaːr]	[ħmaːʁ]	'donkey'
[zanbuːr]	[zanboːʁ]	'hornet'

b) [ʁ] is also realised in words that have /r/ along with OA diphthongs that have historically changed to monophthongs (ibid.), as instanced in the following words:

OA	**MA**	***Gelet***	**Gloss**
xayr	[xeːʁ]	[xeːr]	'welfare'
ṭayr	[tˤeːʁ]	[tˤeːr]	'bird'
ṯawr	[θoːʁ]	[θoːr]	'bull'
dayr	[deːʁ]	[deːr]	'monastery'

2) On the other hand, Tawfiq (2010) argues that there are a number of environments in which the uvular variant is blocked and the apical variant is realised instead. These can be summarised as follows:

a) *In the contiguity of voiced palatal approximant [j]*

Tawfiq (2010, p. 38) contends that when /r/ is in the contiguity of a voiced palatal approximant /j/, it is realised as [r], as in the following examples (ibid., p. 37):

Word	**Gloss**
[rijaːʔ]	'hypocrisy'
[rijaːðˤa]	'sport'

b) *In the contiguity of diphthongs*

Tawfiq (2010, p. 38) also posits that the uvular form [ʁ] does not occur in the presence of diphthongs. However, he notes that a uvular [ʁ] occurs in the contiguity of diphthongs that historically changed into monophthongs as mentioned earlier.

c) *In the vicinity of /ɣ/*

Tawfiq (2010, p. 36) contends that a uvular reflex of /r/ does not occur in the environment of the phoneme /ɣ/ within one word or syllable boundary, as in the following examples:

MA	***Gelet***	**Gloss**

[ɣariːb] [ɣariːb] ‘stranger (m. sg.)’

[ɣarɣara] [ɣarɣara] ‘gargle (n.)’

3) Tawfiq (2010, pp. 34-36) mentions groups of words in which Maṣlāwi speakers do not have a uvular, but rather an apical variant of /r/. These can be summarised as follows:

a) *Semantic conflict*

/r/ is realised as [r] when its realisation as [ʁ] in a word creates a minimal pair with a word containing /ɣ/. This leads to misunderstandings due to the similarity of [ʁ] and the velar fricative phoneme. Therefore, MA speakers produce [r] in those words to avoid causing confusion, as in the following examples:

Word 1	**Gloss**	**Word 2**	**Gloss**
[yisˁbər]	‘to be patient (m.)’	[yisˁbəɣ][143]	‘he paints’
[rasuːl]	‘messenger’	[ɣasuːl]	‘laundry’
[raːja]	‘flag’	[ɣaːja]	‘end/goal’

An exception to this can be found in the words [sˁaːʁ] ‘become’ and [sˁaːɣ] ‘he practiced the art of goldsmithing’ where no such difference is made.

b) *Religious names*

The apical form is also produced in words that refer to religious names, especially the ninety-nine beautiful names of Allah, known as *asmāʾ Allāh al-ḥusnā,* as in the following examples:

[rabb] ‘God’

[raħmaːn] ‘The Merciful’

[ɣaffaːr] ‘The Much-Forgiving’

There is an exception to this rule in the word [ʁamaðˁaːn] (the ninth month of the lunar Islamic calendar) in which the [ʁ] is realised although the apical [r] is maintained in other lunar months like [muħarram] and [radʒab]. However, the same word is realised with [r] (i.e. [ramaðˁaːn]) when it is a personal name.

c) *Proper names*

All the proper nouns that have /r/ are realised with an apical variant, as can be shown in the following examples:

Word	**Gloss**

[143] It should be noted that [ə] is the more likely variant in the first syllable, hence [yəsˁbər].

[furaːt] ‘Euphrates’

[baraːziːl] ‘Brazil’

[raːmi] ‘a personal name’

4) In addition to the above, Salih (1972, p. 65) states that /r/ is sometimes completely deleted regardless of whether this may or not result in a change in the vowel quality. This can be found in the realisation of numbers 11-20. Here are some examples:

MA	***Gelet***	**Gloss**
[ʕiʃʃiːn]	[ʕəʃriːn]	‘twenty’
[idaʕiʃ]	[əhdaʕaʃ]	‘eleven’
[xamistˁaʕiʃ]	[xməstˁaʕaʃ]	‘fifteen’

a) /r/ is often assimilated to a preceding /q/[144] (Tawfiq, 2010, p. 40), as in the following examples:

MA	***Gelet***	**Gloss**
[ʕaqqabi]	[ʕagraba]	‘scorpion’
[aqqaʕ]	[agraʕ]	‘bald-headed’

As has been mentioned earlier, Blanc (1964, p. 22) refers to a vocalisation of /r/ in MA, particularly in the following examples:

CBA	**MA**	***Gelet***	**Gloss**
[ɣarbeːl]	[ɣuːbeːl]	[ɣərbiːl]	‘sieve’
[arbaʕa]	[oːbaʕa]	[arbaʕa]	‘four’
[mbeːħa]	[mbeːħa]	[lbaːrħa]	‘yesterday’

b) It should be noted here that some of my informants noted that Maṣlāwis realise the apical variant in words from SA or foreign languages, as in /θawra/ → [θawraˑ] ‘revolution’.

From the above, we can notice that the literature has come up with a number of phonological environments and groups of words believed to be conditioning the occurrence the rhotic variants in MA. The next sections will deal with how this study is going to investigate this variable. This will include the particular linguistic and social factors expected to be conditioning the behaviour of this variable along with the rationale behind their inclusion.

[144] This results in a geminated [q].

7.3 The variable in this study

This variable concerns the realisation of the rhotic sound as one of the variants we discussed earlier. A change towards the mainstream realisation of this variable is hypothesised to be at work; it is thus expected that we will find a shift from the local forms toward the *gelet* apical. It is also hypothesised that there is more to the conditioning of the different realisations of this variable that is reported in the literature.

7.4 Data and analysis

Unlike vowel variables (discussed in later chapters), the rhotic variable represents a categorical variable with identifiable discrete variants. Along the general lines of the auditory analysis set out earlier in (6.7.1), a total of 2658 tokens were analysed for this variable. Moreover, the quiet conditions used in recording sessions provided clean recordings and made it easier to make a distinction between the variants auditorily.

7.4.1 Coding protocol

In previous sections, I presented an overview of the envelope and contexts of variation of this variable. This section deals with what has and has not been coded in view of that presentation. Tagliamonte (2006, p. 86) remarks that to ensure the replicability of any study, decisions on what to include or exclude from the analysis should be conspicuously stated. In this study, all instances of lexical items that had the variable (r) within the circumscribed variable contexts were coded. The tokens that show a categorical form (i.e. groups of words in which the production of /r/ is invariably apical or zero realisation sketched in 3 and 4 of section 7.2.3 in this chapter) were excluded. A ceiling of three tokens of each lexical item per speaker were coded. In view of the previous accounts of the variable and the research aims and questions of the present study, the predictors consisted of four linguistic and three non-linguistic independent factors, also called predictors (Johnson, 2009). Each token was coded for each linguistic and non-linguistic factor separately. These outlined in Table 8 below.

Fixed Predictors	Levels
Age	Old, Middle, Young
Class	Lower Middle-class, Middle -class
Gender	Female, Male
Stress	Stressed, Unstressed
Environment	/a/, /aː/, /u/, /uː/, /oː/, /i/, /iː/, /eː/
Syllable position	Onset, Coda, Gemination
Parts of speech	Adjective, Noun, Verb

Table 8: Fixed predictors with the levels coded for each.

The non-linguistic factors included the three social variables, age, gender and class. The linguistic predictors included the vowels that come in the same syllable of /r/. This will allow us to assess the conditions outlined in 1 and 2 of section 7.2.3 that have been cited in the literature as environments for the traditional variant of /r/ to occur or not in MA. The inclusion of syllable, parts of speech and stress positions allows us to ascertain their effects on the distribution of variants — a prospect that also has hitherto not been visited in the literature. In syllable position, three categories were coded: onset, coda and gemination. Phonologically, an intervocalic gemination is the commonest position for geminates in Iraqi Arabic. This is viewed as a long consonant consisting of two short consonants and is more common than, e.g. word-initial or peripheral gemination. One is a coda of the first syllable while the other is an onset of the next syllable (Al-Tamimi, 2004; Thurgood, 1993). In view of this, the geminated instances of this variable in this study were coded as a separate group. This was deemed conceptually justified unlike, for instance, assigning the geminated /r/ to either onset or coda of the syllable, which does not exist in Arabic dialects. This can cause confusion as intervocalic geminate consonants in Arabic are distinctively contrastive with their corresponding singletons. Therefore, syllabifying the words that way would confuse them with other words that have a singleton /r/, as in [marra] ‘once’, as against [mara] ‘woman’. Therefore, in this study, the geminated tokens were included as a separate group alongside onset and coda.

7.4.2 Rhotic variants coded in this study

Preliminary analysis showed that there are three variants of this variable in MA (Table 9):

Variant	Example			
[ʁ]	/riːʃ/	→	[ʁiːʃ]	‘feather’
vocalised	/ʕruːq/	→	[ʕooːq]	‘bread’
[r]	/raːħ/	→	[raːħ]	‘he went’

Table 9: An outline of the variants coded for the Rhotic variable.

The first variant is the uvular one, which is well described in the literature as the traditional realisation of rhotic sound in MA. The second variant coded here is a vocalised realisation of /r/. This is another traditional variant that has previously been described as being limited to certain conditions. However, as we will see in more detail later, the results show that this is an established variant that occurs in different positions and environments. The third and last variant is apical [r], which is considered a *gelet*-type supralocal mainstream one.

Having presented the envelope of variation along with the factors that have been coded in the analysis of this variable, I turn now to the statistical modelling used in analysing this variable.

7.4.3 Statistical modelling

Fitting a suitable model for analysing the data depends on the type of the variants for the dependent linguistic variables (discrete or continuous). For this variable, all fixed predictors shown in Table 8 above were incorporated into the design. Speaker and token were set as random factors. Winter and Wieling (2016, p. 9) note that random effects allow for speakers to vary in their speech with regards to fixed predictors.

A multinomial regression mixed-effect model was fit in R utilising the ‘multinom’ function from the package ‘nnet' (Ripley *et al.*, 2016). The p-values were calculated using the ‘coeftest’ function from the ‘lmtest’ package (Hothorn *et al.*, 2018). This function returns a coefficient matrix displaying the estimates, associated standard errors, test statistics and p values. I checked for interactions between social factors. A model with interactional terms between linguistic factors was also performed. However, an ANOVA comparison between the two models was performed and revealed no statistically significant difference between them. Therefore, the first model, being the simplest one, was adopted[145].

[145] A model with interaction terms between all social and linguistic factors combined was not possible as R was unable to run such a model with so many levels for the factors that exist in the model. With errors and even

It was found that the occurrence of the three forms in diphthong environments accounted for only 12 tokens with several knockouts, which runs the risk of skewing the data and causing problems. Erwin (1963, p. 26) notes that diphthongs in Iraqi Arabic consist of a short or a long vowel plus a semi-vowel /j/ or /w/. All 12 tokens coded in the data are actually repetitions of the word [ʁajjəħ] 'going' in which there is a short vowel /a/ followed by a geminated semivowel /j/. This is congruous with Erwin's description. Therefore, the 12 tokens were merged with the most similar category, which is /a/.

R is set by default to show simple rather than main effects. In the simple effect, the computed intercept will have the value of the reference level rather than the overall effect of the variable (i.e. the main effect). Therefore, to obtain the main effect for each factor, all the variables were contrast-coded using sum coding. In this type of coding, the mean of the dependent variable for a given level is compared to the overall mean of that variable. In other words, a level of a variable is compared to all other levels of the variable. This comparison is operationalised by assigning numerical values to each level. These numerical values allow for comparisons between levels of the variables so that the intercept for a model is computed with all the levels coded are taken into account (Allerhand, 2011, pp. 74-75). Allerhand (ibid.) notes that this will provide precise models and make a better interpretation of the main effects and interactions therein. The sum coding method is discussed with examples by Winter (2013).

7.5 Results

This section presents the results of the analysis of this variable starting first with a number of observations concerning the quality as well as the distribution of the variants in this variable. There follows a section on the statistical modelling built for analysing this variable with graphs and figures are given throughout.

7.5.1 Observations

In this section, I present a number of observations that can be gleaned as regards the coded variants described in the previous section. Through the analysis of the data, this study

crashes that R experienced dealing with such a treatment, there was a need to simplify rather than complicate the model. The computational problems arising from complex models are discussed in (Verbeke *et al.*, 2018). The following syntax was used to run the model: model <- multinom(response ~ predictor1*predictor2*predictor3+predictor4+predictor5,random=~Speaker+Token, data=data)

suggests that a uvular variant can actually be expected in some contexts previously identified as ones in which this realisation does not occur in MA. These can be presented as follows:

a) Tawfiq (2010, p. 36) maintains that a uvular form does not occur in the contiguity of /ɣ/ within the same word or syllable boundary. However, analysis of this study does not support this condition and as can be instanced in /ɣeːr/ → [ɣeːʁ] 'other'.

b) Tawfiq (2010, p. 38) states that a uvular form does not occur in the environment of a voiced palatal approximant /j/. However, this was not evident in my data, as in [xjaːʁ] 'cucumber' and [tˤjoːʁ] 'birds'.

c) Other observations from the data also provide evidence that MA is a dialect that shows vocalisation of the rhotic variable. Vocalisation of rhotic consonants is a form of lenition that has been reported in several languages such as Dutch, English, German, Danish and French but is rarely found in other languages (Taylor-Raebel, 2015, p. 23). For example, In German, uvular [ʁ] is realised in onsets while it is vocalised elsewhere (Wiese, 2000, p. 253). Ibrahim (1969, p. 259) alleges that this feature has some peculiarity in Mosul and that it occurs in certain words (listed below), particularly when /r/ is flanked by a neighbouring guttural sound. In these words, /r/ is vocalised and as follows:

SA	**MA**	***Gelet***	**Gloss**
ġurbāl	[ɣuːbeːl]	[ɣərbiːl]	'sieve'
qurṣa	[qoːsˤa]	[gursˤa]	'loaf of bread'
xurqa	[xoːqa]	[xərga]	'tatter'
xirfān	[xoːfeːn]	[xərfaːn]	'sheep'

Blanc (1964, p. 22) offers a chronological explanation for this feature, as can be instanced[146] in the word 'forty': [arbʕiːn] → [aʁbʕiːn] → [awbʕiːn] → [oːbʕiːn].

Analysing the data of the current study has also revealed that there is more to the vocalisation of /r/ in MA. It was revealed that vocalised forms are not solely limited to the few words aforementioned. As will be assessed and discussed further below, this realisation can be found in different word categories, as in the following examples:

/arqaq/ → [aːqaq] 'softer'

/ʕruːq/ → [ʕooːq] 'bread'

/nifraħ/ → [nəfuaħ] 'we rejoice'

[146] Blanc, in fact, gives a partial illustration of this sequence (i.e. [arb], [aʁb], etc.). I present it here in a full word.

Figure 4 below shows an example of the vocalised form in the realisation of the word /ʕʁuːq/ where we can see the highlighted interval representing the place for sound after the /ʕ/ pharyngeal consonant, which is where a uvular fricative [ʁ] form is expected (indicated by parentheses). It can be seen that this portion after the pharyngeal was realised a vowel with an almost homogeneous formant structure that is a continuation of that of the following vowel [oː].

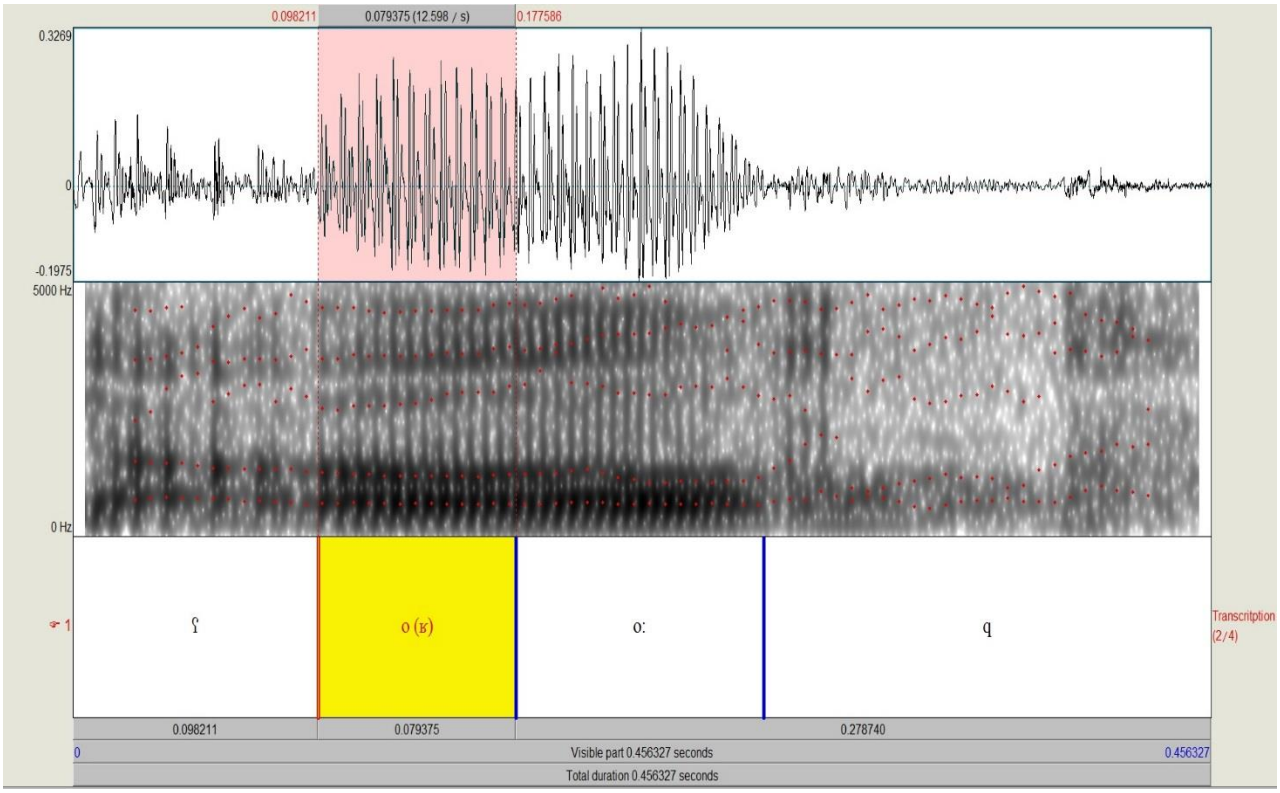


Figure 4: The realisation of the word /ʕʁuːq/ by a Maṣlāwi speaker.

Furthermore, this form can occur in almost all contexts (i.e. environments, word categories, stress and syllable positions) in which other variants can also occur. The next section will shed more light on this point assessing a number of predictors (social and linguistic) that affect the occurrence of the variants of the rhotic variable.

7.5.2 Results of R

This section concerns the results of statistical treatment of the rhotic variable accounting for the different factors that may affect the use of its different forms to the level of significance. Before moving to the statistical modelling performed in R, an overview of the overall variants produced is given in Figure 5 below. This figure displays, in percentage, the overall distribution of each variant produced regardless of independent factors. It appears at first glance from the figure that the rhotic variable exhibits variable behaviour, with 57% of the

tokens realised as uvular whereas apical and vocalised forms formed 30% and 13% respectively.

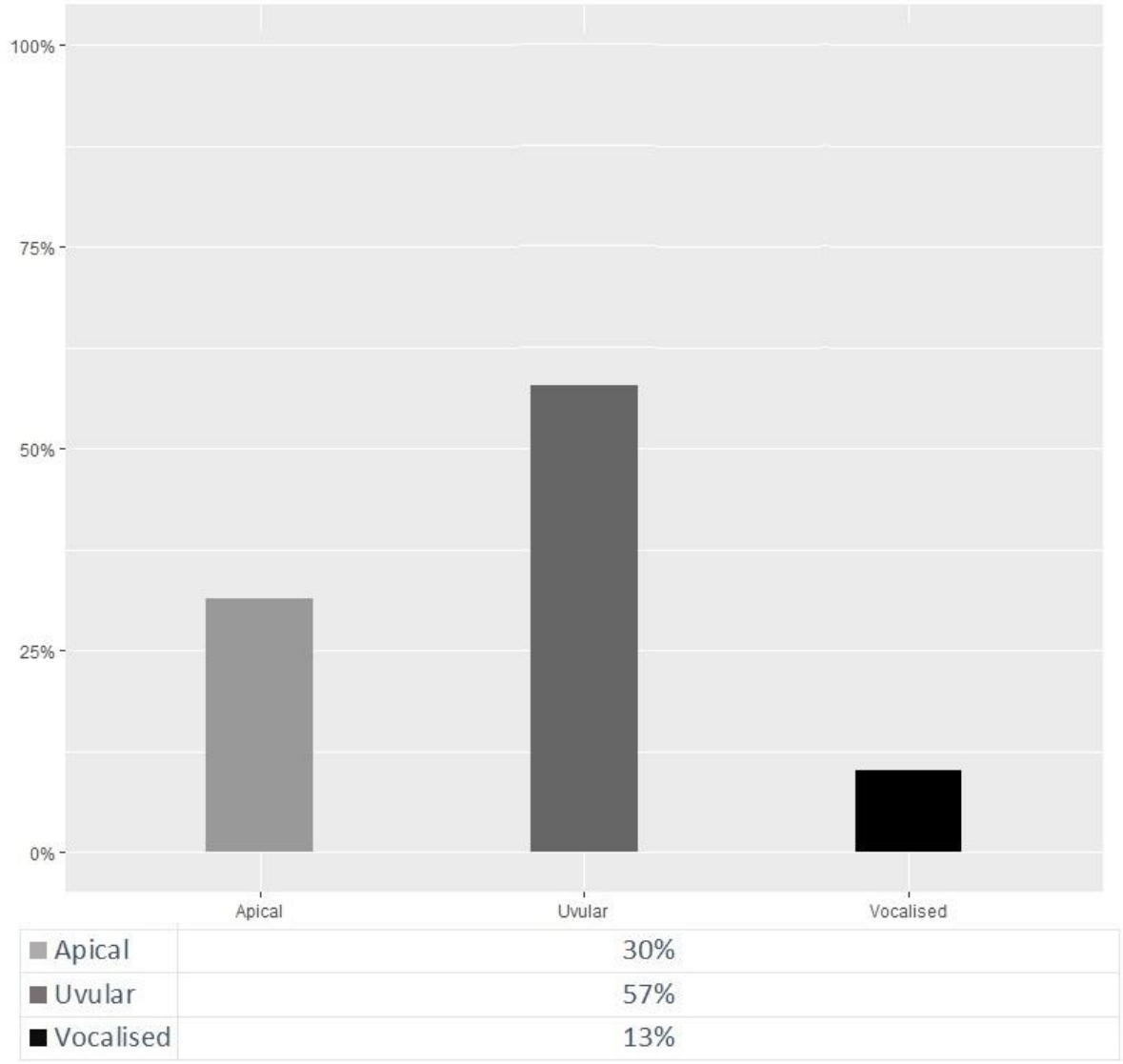


Figure 5: The overall distribution of rhotic variants.

For the convenience of illustration, the results are summarised in Table 10 and Table 11 below, which display the predictors along with their coefficients shown in the 'Estimate' column. The uvular variant [ʁ] was set as the reference level. If the use of apical and/or vocalised variants produced in/by a particular factor is returned with a positive coefficient value, this indicates that this variant is favoured in/by that factor in relation to the uvular form. The reverse is true for variants and factors returned with a negative coefficient value. The percentage of each level is given in the rightmost column preceded by a column showing the significance of each effect indicated by the asterisk (*)[147].

[147] Significance codes run as follows: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1.

Predictors	Estimate	S.E.	Pr(>|Z|)	%
Gender				
Male (Baseline)				
Apical:Female	-0.5042187	0.0653665	0<000 ***	21.5
Age				
Old (Baseline)				
Apical:Young	1.2450363	0.0824881	0<000 ***	53.9
Apical:Middle	0.3690192	0.0815174	0<000***	31.4
Class				
MC (Baseline)				
Apical:LMC	-0.1918377	0.0651468	0.003**	21.4
Syllable				
Onset (Baseline)				
Apical:Coda	0.1633289	0.1126098	0.147	31.1
Apical:Gemination	0.1670861	0.1999728	0.403	36.7
Stress				
Unstressed (Baseline)				
Apical:Stressed	-0.1105703	0.0721170	0.125	28.0
Part of Speech				
Verb (Baseline)				
Apical:Adjective	-0.1231654	0.0893747	0.168	28.8
Apical:Noun	-0.0779597	0.0711831	0.273	28.4
Environment				
/u:/ *(Baseline)*				
Apical: /a/	0.3850368	0.1481582	0.009 **	37.9
Apical: /a:/	-0.2276748	0.1856203	0.220	26.1
Apical: /e:/	0.1220607	0.2841269	0.667	30.4
Apical: /i/	0.0392937	0.1737520	0.821	32.3
Apical: /i:/	0.0106180	0.1720222	0.951	28.4
Apical: /o:/	-0.1029691	0.6446754	0.873	33.3
Apical: /u/	-0.2280111	0.1740877	0.190	21.6
Interactions				
*Gender*Age*	N.S			
*Gender*Class*	N.S			
*Age*Class*	N.S			
Intercept	-0.9826172	0.1582199	0<000 ***	

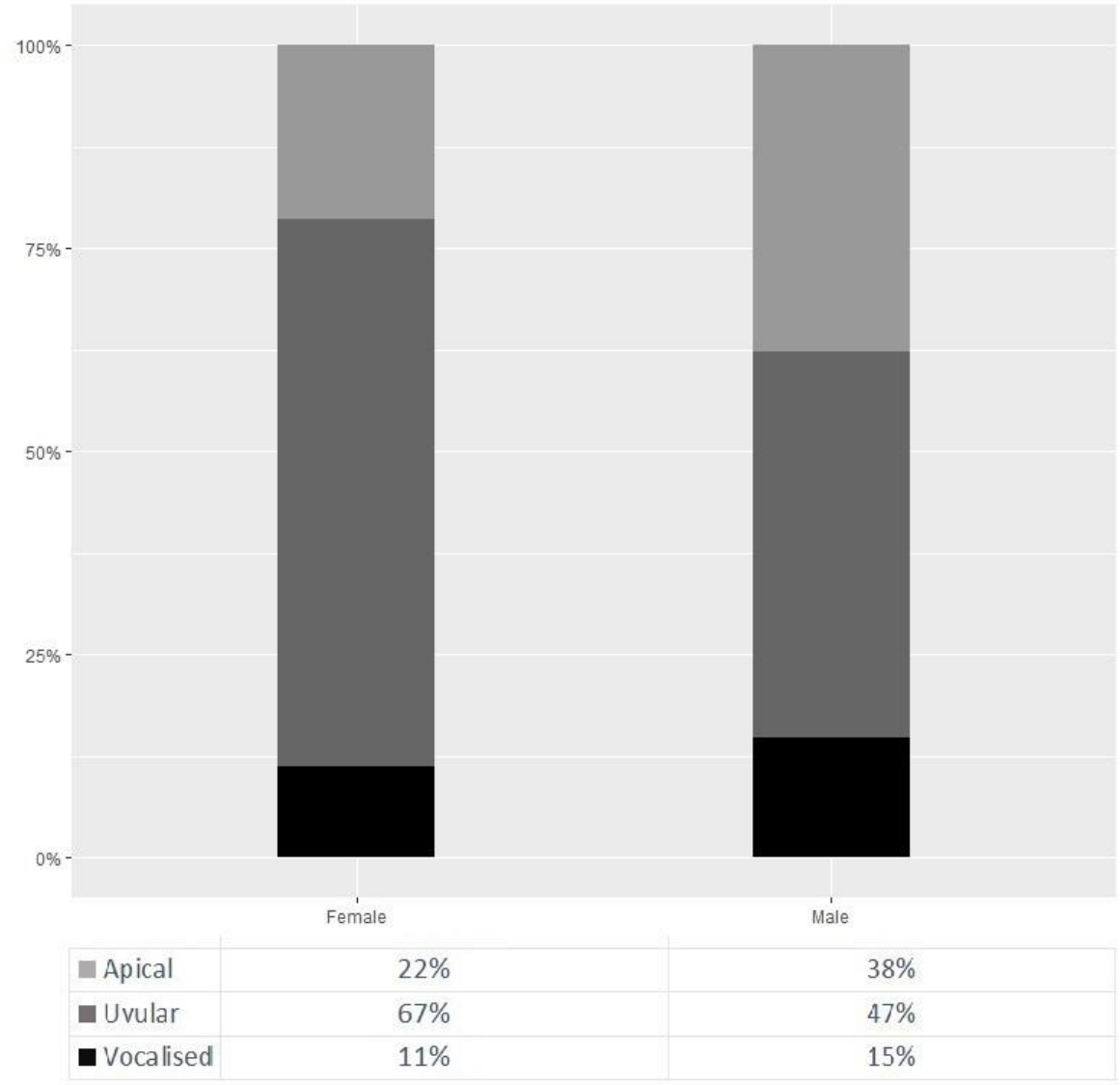
Table 10: Results of the mixed-effect multinomial regression model for the apical variant.

Predictors	Estimate	S.E.	Pr(>|Z|)	%
Gender				
Male (Baseline				
Vocalised:Female	-0.3510596	0.0738273	0<000***	11.17
Age				
Old (Baseline)				
Vocalised:Young	0.1228925	0.1116091	0.270	10.46
Vocalised:Middle	-0.2161649	0.1071206	0.043*	11.46
Class				
MC (Baseline)				
Vocalised:LMC	-0.2096306	0.0734452	0.004 **	12.15
Syllable				
Onset (Baseline)				
Vocalised:Coda	-0.3956165	0.1804338	0.028 *	9.59
Vocalised:Gemination	0.2416723	0.3234310	0.455	6.67
Stress				
Unstressed (Baseline				
Vocalised:Stressed	-0.3406006	0.0903570	0.000 ***	12.08
Part of Speech				
Verb (Baseline				
Vocalised:Adjective	0.2613068	0.1250908	0.037 *	10.12
Vocalised:Noun	0.0263643	0.0903378	0.770	13.83
Environment				
/u:/ *(Baseline)*				
Vocalised: /a/	-0.6254302	0.2158976	0.004 **	7.21
Vocalised: /a:/	0.1023133	0.2539257	0.687	9.39
Vocalised: /e:/	-1.1273330	0.6478422	0. 081	2.53
Vocalised: /i/	-1.0858304	0.2907493	0. 000 ***	4.79
Vocalised: /i:/	-0.6214038	0.2810085	0. 027 *	4.88
Vocalised: /o:/	0.7879653	0.7389628	0.286	16.67
Vocalised: /u/	1.1718632	0.1975571	0<000 ***	29.13
Interactions				
*Gender*Age*	N.S			
*Gender*Class*	N.S			
*Age*Class*	N.S			
Intercept)	-1.6652306	0.2270119	0<000 ***	

Table 11: Results of the mixed-effect multinomial regression model for the vocalised variant.

From both of the tables, we can see that there is a gender effect in which females appear to be disfavouring apical and vocalised forms in their speech. This is evidenced by the negative estimated values coupled with significant effects for these categories. Figure 6 below displays the distribution of variable forms of the rhotic variable by gender in MA. This figure illustrates this gender pattern in which we can see that the apical and vocalised forms

accounted for 22% and 11% of females' speech compared to the reference level (i.e. uvular form), which comprised 67%. This means that females prefer the traditional uvular variant to the other forms. The distribution of the uvular variant accounted for 47% in the speech of male speakers while the vocalised and apical forms accounted for 15% and 38% in their speech respectively.

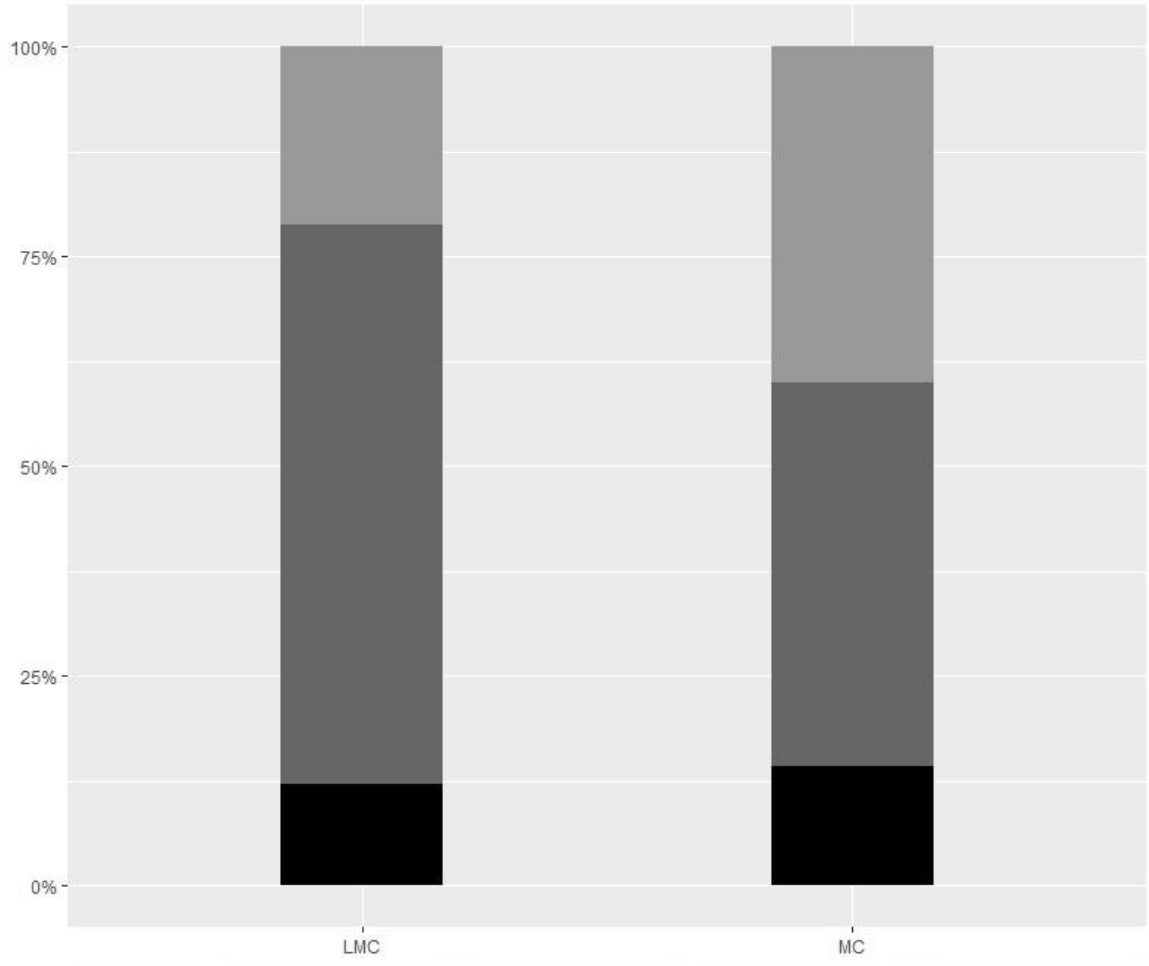


	Female	Male
Apical	22%	38%
Uvular	67%	47%
Vocalised	11%	15%

Figure 6: The distribution of rhotic variants by gender.

Another pattern can also be seen in class in which the apical and vocalised forms were in the minority in the speech of LMC speakers with statistically significant negative coefficients for both variants in their speech. This can be illustrated in Figure 7 below in which we can see that the apical and vocalised forms were produced in lower proportions (21% and 12% respectively) than the uvular form (reference level), which accounted for 67% in the speech of LMC speakers. Middle class speakers showed relatively higher proportions of these two

variants, more particularly the supralocal apical variant with about twice the proportion (i.e. 40%) recorded for their LMC counterparts.



	LMC	MC
Apical	21%	40%
Uvular	67%	46%
Vocalised	12%	14%

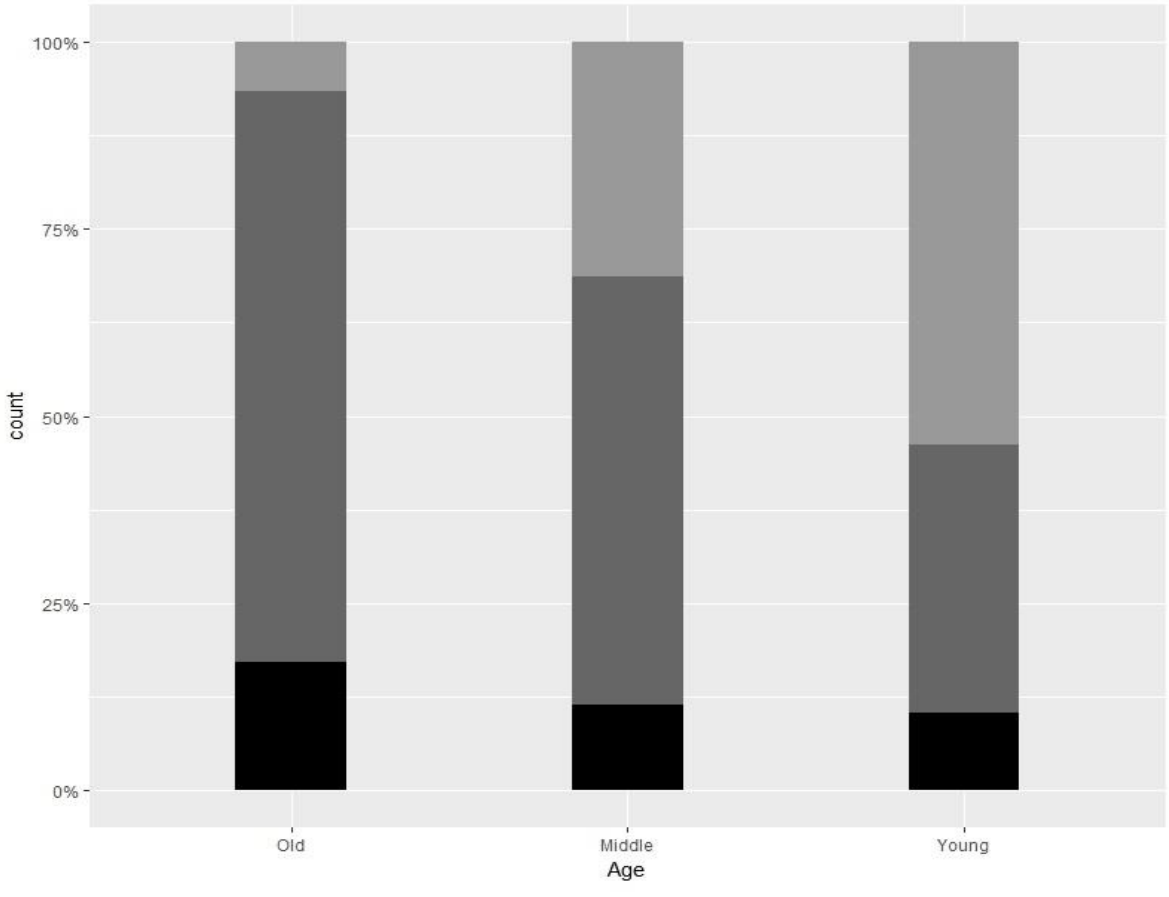
Figure 7: The distribution of rhotic variants by class.

There is also an age-related pattern in which the young speakers appear to be favouring the apical form with a statistically significant positive coefficient for this pattern, which indicates they favour this variant. Also significant was the middle-aged group's rates of the apical and vocalised forms. On the one hand, their occurrence of the apical form was returned with a positive coefficient, which indicates their favouring of this form. On the other hand, their production of the vocalised form was returned with a negative coefficient indicating their disfavouring of this form.

These findings are a good diagnostic for a change in apparent time in the use of this variable as young and middle-aged speakers appear to be drifting away from the local forms and this can be illustrated in Figure 8 below. We can see the differences in the use of the supralocal

apical form with an upward trend across the three cohorts as indicative of a rise in this form in apparent time in MA. The figure shows that the apical form goes up from only 7% for the old speakers and 31% for the middle-aged up to 54% of this form for the young group, which is about eight times higher than the proportion for their old counterparts. The difference between the old and the middle cohort is 24%, with the change seems to increase in rate most noticeably between the old and young cohorts (with a difference of 47% between them). On the other hand, the uvular form shows a downward trend in use from 76% for the old group and 57% for the middle-aged down to 36% for the young group.

However, these figures show us that this shift is not near completion, which may be an indication that the change is gradual and not dramatic. This is because the local forms (both uvular and vocalised) were realised in around 40% by the leading group of change (i.e. young). This is also demonstrated through the absence of dramatic differences (e.g. a complete absence of uvular instances in any cohort sampled).



	Old	Middle	Young
Apical	7%	31%	54%
Uvular	76%	57%	36%
Vocalised	17%	12%	10%

Figure 8: The distribution of rhotic variants by age.

Figure 9 illustrates the distribution of rhotic variants across age, gender and class combined. We can see rather similar trends that conform to the overall trends observed in each individual factor. A glance at the figure reveals that the younger groups, noticeably MC males, had the highest rates of the supralocal variant. This variant accounted for 66% of their overall forms, while it accounted for 59% of LMC males' total use. Likewise, it can be seen that MC females in the same age cohort produced more of the supralocal apical variant (49%) compared to their LMC peers (29%). These findings are accordant with the overall trends observed in the three individual factors, age, class and gender in which young, MC, male speakers respectively were found to be favouring the supralocal variant. The local uvular form appears to be the preserve of the old groups who demonstrated high rates of this form. The middle-aged groups sit rather in between although they produced the uvular form in higher rates than the other two forms. However, MC male speakers produced the highest rate (40%) of the supralocal form in this cohort. This finding also conforms to the overall gender and class discussed above. Section 7.6 will discuss all these findings.

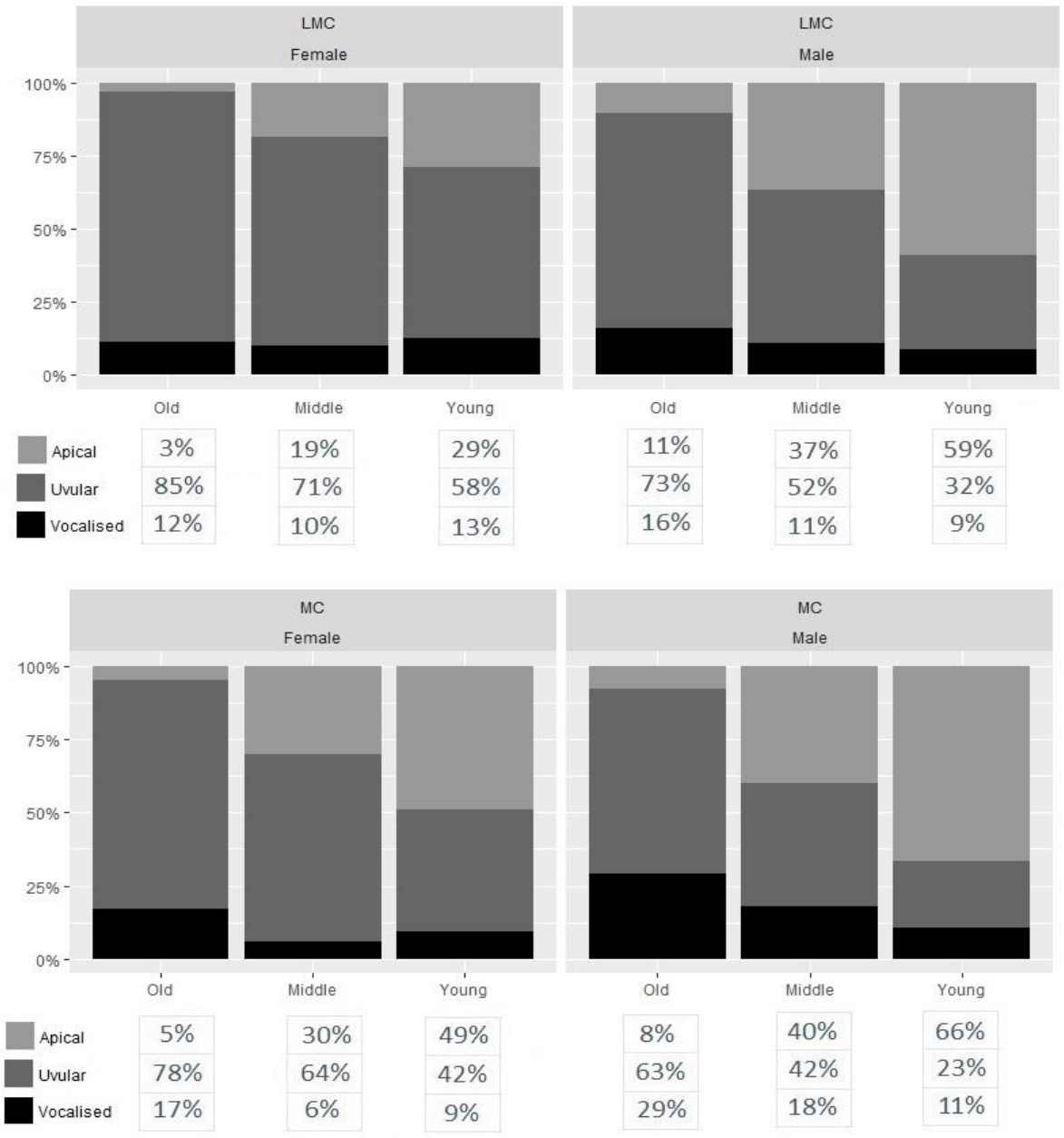


Figure 9: The distribution of the rhotic variant by age, gender and class.

The model also returned a number of significant effects for linguistic factors in conditioning this variable. Figure 10 below breaks down the overall distribution of the three variants across all environments. It can be seen that the apical form occurred in varying proportions in all possible environments. The occurrence of this variant was found to be more likely in the contiguity of /a/ with a positive coefficient. Although the occurrence of the apical form in other environments was not found significant, it at least indicates that it is permitted in all phonological environments with no exceptions. On the other hand, the traditional form has also shown a revealing pattern in that it occurred at varying rates next to all short and long vowels. This finding tells us that this variant can occur next to any possible vowel rather than just the long ones as stated by Tawfiq (2010) and Salih (1972).

The results also reveal that the vocalised form is variably present in MA with a number of linguistic effects on its occurrence. It was found to be possible in all contexts with its occurrence is less likely in the environment of /a/, /i/, /iː/ and more likely in the environment of /u/. It should be noted that this form occurred in overall smaller proportions than the other forms. However, the results at least tell us that there are no contextual limitations on its occurrence and hence give us a new insight on this variant in MA, which has long been believed to be limited to certain constraints.

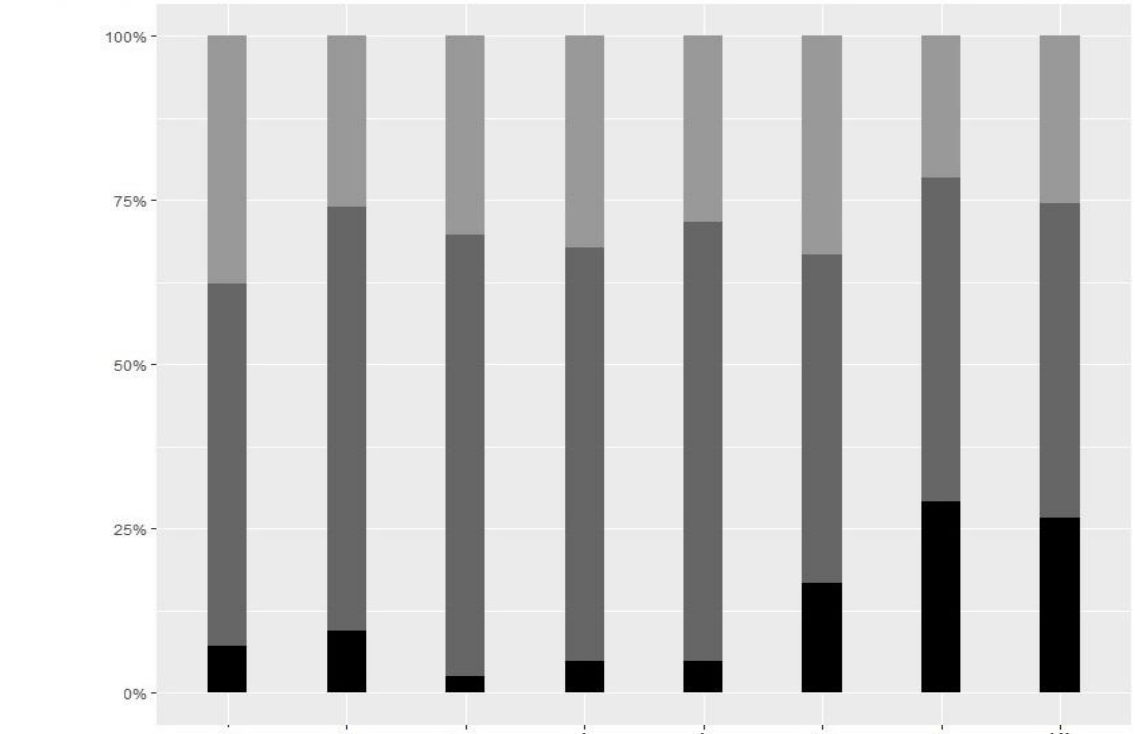
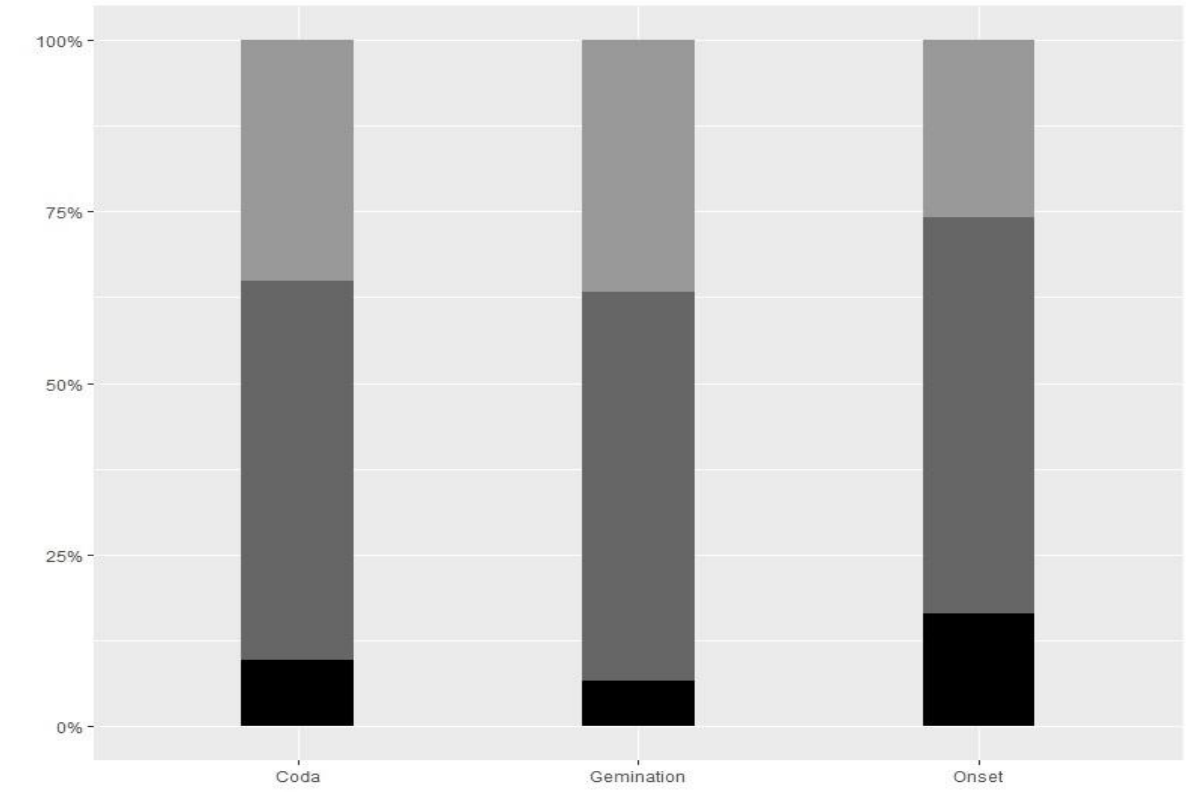


Figure 10: The distribution of rhotic variants by environment.

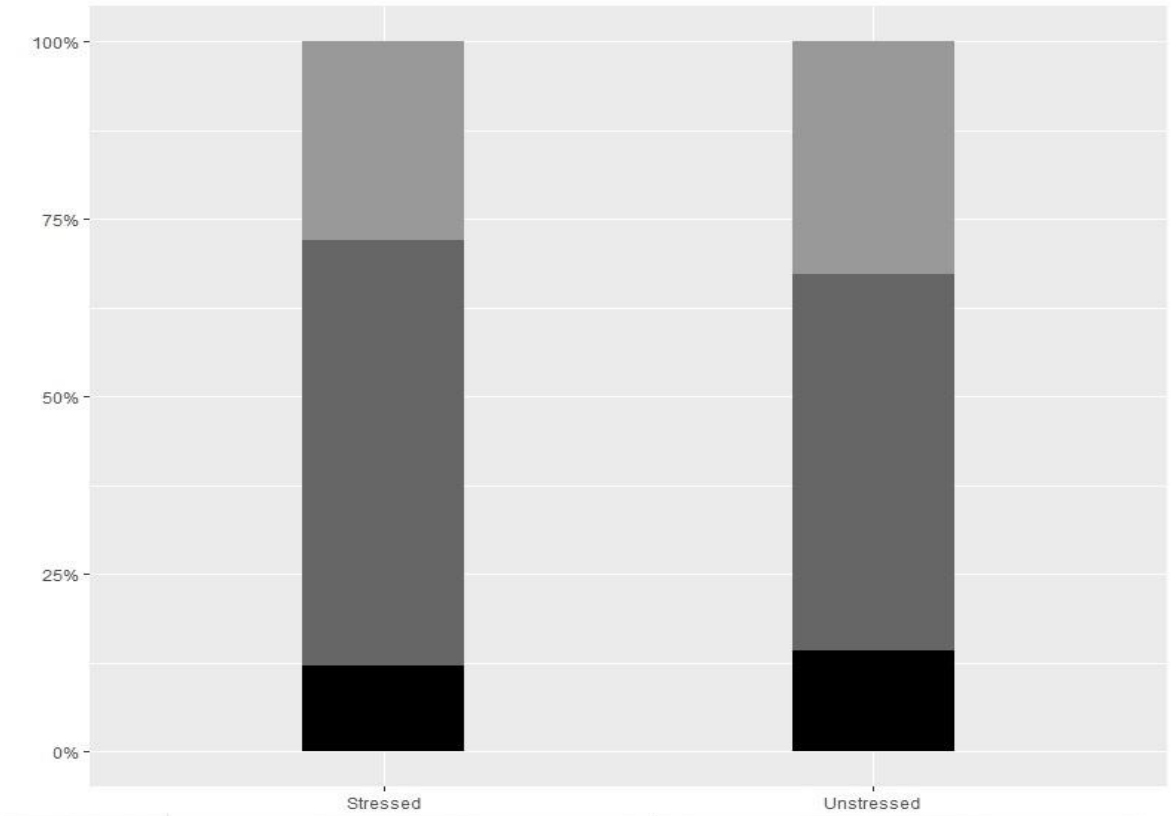
Figure 11 below displays the distribution of the three variants by syllable position. The figure shows us that the variants occurred in all possible syllable positions with higher rates for the uvular variant than the others. Of note here is the supralocal form, which appears to be occurring in MA in all possible syllable positions. It was also found that the vocalised variant is less likely to occur in coda and geminated positions and is also possible in other syllable positions, albeit in smaller rates than the other variants.



	Coda	Gemination	Onset
Apical	35%	36%	26%
Uvular	55%	57%	58%
Vocalised	10%	7%	16%

Figure 11: The distribution of rhotic variants by syllable position.

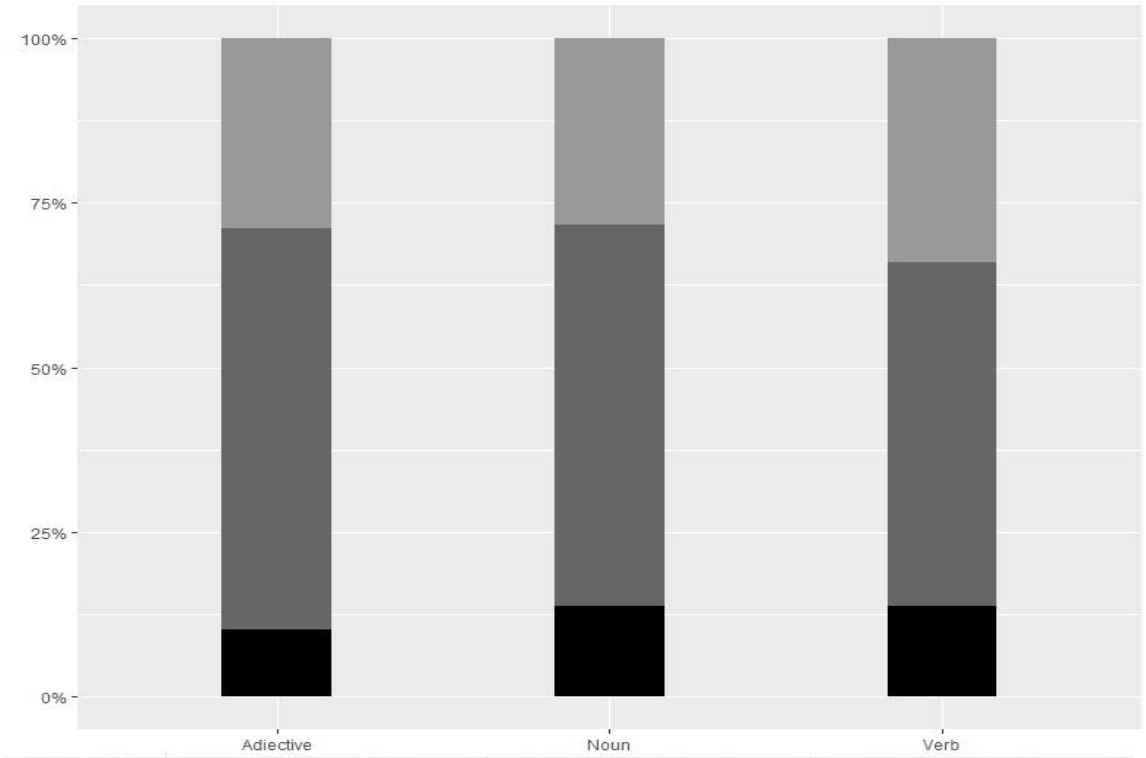
Figure 12 below displays the rates of the three variants in both stressed and unstressed positions. The three forms occurred in various proportions in both contexts with the occurrence of the apical and vocalised forms is less likely in stressed positions with proportions stood at 28% and 12% respectively. However, these findings suggest that all three variants, whether local or supralocal, can occur in both stressed and unstressed positions. These findings further underline the status of the three variants as established ones in MA.



	Stressed	Unstressed
Apical	28%	33%
Uvular	60%	53%
Vocalised	12%	14%

Figure 12: The distribution of rhotic variants by stress.

The model also revealed that the variants occurred, in varying proportions, in all parts of speech. Figure 13 below displays the distribution of the forms across the parts of speech coded for the analysis. The vocalised and apical forms occurred in all categories, albeit in smaller proportions than the uvular form. These findings indicate that the supralocal form is making its way in all possible parts of speech. They also tell us that the vocalised form is not limited to a few words, as has been previously assumed to be the case.



	Adiective	Noun	Verb
Apical	29%	28%	34%
Uvular	61%	58%	52%
Vocalised	10%	14%	14%

Figure 13: The distribution of rhotic variants by part of speech.

With the spread of variants across the social and linguistic factors presented and illustrated, the next section will attempt to explain and discuss the results presented for this variable.

7.6 Discussion and concluding remarks

The findings have shown us that there is more to what we have in the literature on the variability of this variable. The findings of the current study have shown that the variants of the rhotic variable are possible across all linguistic and social factors. Some of these findings do not support previous studies on this variable in a number of occasions while other findings are in line with previous statements. The analysis has demonstrated that a number of factors are at play in the occurrence of rhotic variants in MA although some of them were not found to be significantly influencing the use of the variants.

For the traditional uvular variant, the analysis of this study has testified to the occurrence of uvular form in almost all phonological environments and not just when next to /iː/, /eː/ and /oː/ as stated by Tawfiq (2010). The analysis has found that the uvular form [ʁ] can be expected next to all long and short vowels as has been illustrated earlier in this chapter. This study has also tested statements in previous studies (e.g. Tawfiq, 2010) that the occurrence of uvular form is not expected in the environment of sounds such as palatal approximant and

velar fricative. Another environment in which the uvular variant was believed to be blocked is that of diphthongs. Tawfiq (2010, p. 42) states that the uvular variant does not occur when it is adjacent to a diphthong. However, the results of this study have shown that the uvular variant was found next to diphthongs (e.g. [ʁejjəħ]), albeit in a smaller proportion compared to other environments. Results have also shown that the uvular variant can occur in different parts of speech in both stressed and unstressed positions as well as in onset, coda and gemination contexts. The finding of the uvular variant being produced in geminated contexts has not been previously mentioned. Tawfiq (2010) provided examples of geminated /r/ and noted that an apical form is pronounced in this context as in /itbarra/ → [itbarra] 'he repudiated'.

The findings above show that the uvular variant transcends the constraints previously mentioned to be at work in its occurrence in MA. The analysis has shown that this variant can be expected in varying distributions in the different factors incorporated in the analysis and is thus an across-the-board variant in Maṣlāwi Arabic.

The study has found that this variant is not the only traditional variant of MA. The study has assessed a long established statement in the literature that vocalised realisations of the rhotic variable in MA occur in a few words such as [qoːsˤaˑ] 'loaf of bread' and [xoːfeːn] 'sheep'. It has shown that this realisation can occur in more than just a few words. The analysis has revealed that this variant occurs in varying distributions across all the linguistic predictors such as phonological environments, parts of speech, stress and syllable positions although most of these were not found to be statistically significant. The overall view from these findings is that the vocalised variant occurs variably in all contextual possibilities; therefore, it shows a relaxation of the few-word condition usually mentioned as the only context in which this form can be expected. As far as this study can tell, what we have in Mosul is an established vocalised form, albeit in lower rates of occurrence than the other traditional form, i.e the uvular.

The apical form was also found to be existing in MA. The findings of the analysis show that the apical realisation enters in MA by two routes. The first route is through loanwords from SA as sketched earlier in this chapter while the second one is through a change from an external source that is through contact with *gelet*, as I will discuss further below. The supralocal variant was found in all possible contextual configurations in a rather close range of occurrence between the coded environments and that it is more likely to occur in the environment of /a/. This variant was also found to be occurring in all other possible linguistic constraints such as different parts of speech, stress and syllable permutations although the

effects of these factors on its occurrence were statistically insignificant. These findings demonstrate that the supralocal variant is making its way unhindered into the system of MA. It is thus no longer the case that this variant is only present in certain contexts such as in religious and proper names, as has been described earlier in 7.2.3.

The analysis has also shown that there is a social patterning of variation in the use of the different rhotic variants in MA. In this respect, it was shown that there are gender, class and age effects on this use. The pattern visible in gender and class is one in which female and LMC speakers respectively show a clear preference for the traditional uvular form, which accounted for greater rates than the other forms in their speech. The supralocal apical form appears to be more present in the speech of the opposite groups, i.e. male and MC speakers who had greater rates of it in their speech. As presented earlier in 6.4.1 and will be explored further in chapter 11, social attributes behave rather varyingly across communities. The trend of speakers of higher class groups opting for innovative forms is quite a trend, particularly in cases of change from above. In Mosul, this largely has something to do with the fact that MC speakers cluster in the modern left side of the city Sāḥil al-aysar, which encompasses large swathes of non-Maṣlāwis who have been coming to the city over the past decades. Therefore, they have constant contact with non-Maṣlāwis, which is a fertile ground for linguistic change to take place. This stands in contrast to the right side of the city, i.e. Sāḥil al-ayman where people of lower social classes tend to live.

In terms of gender, it is often the case that women tend to orient themselves towards innovative forms in some societies. However, we may find men rather than women who opt for this use in others. The finding of women opting for traditional rather than supralocal forms in MA is interesting as it challenges the often reported fundamental trends in Western scholarly traditions. As will be shown later in chapter 11, the Maṣlāwi society draws discrete gender-related roles whereby men and women may interact with other members of the society are very different. This, in turn, results in disparate language behaviours that surface as attenuation of local forms (e.g. by men, as we saw in this study) as against maintaining them (e.g. by women). Before discussing the implications of these patterns any further, we need to see how these social factors will fare in the production of other variables of this study so that a general pattern could be drawn and interpreted. This will find more room in the discussion chapter where the overall effect of social and linguistic factors on the speakers' production will be coherently discussed.

The results have also revealed a change in apparent time in the use of this variable in that the traditional uvular realisation appears to be levelled in MA. The statistically significant

difference between the age cohorts can be interpreted as a generational difference in the use of this realisation. It has been demonstrated that the supralocal apical variant is a feature on the rise in MA with the young speakers and, to a lesser extent, middle-aged speakers as the leaders of this change. The apical realisation is gaining ground in MA at the expense of the traditional uvular form, which seems to be retained predominantly by the older group. These findings are in line with the initial expectations set out in this study that the traditional forms of the rhotic variable are declining in use in MA. The fact that young speakers are in advance of the other groups in adopting this innovative form is also not surprising. Rajab (2011) has also concluded that there is a current decline in the use of the uvular form, albeit without a statistical treatment to confirm her findings. Rajab's study included a certain number of words with no limit for the repetitions. Upon the number of repetitions, she concluded that there was a discrepancy in her informants' adoption of the uvular variant. Furthermore, over the course of my research, several informants commented that Maṣlāwi young males particularly tend to shift the realisation of their /r/s towards the mainstream *gelet* one. To put this finding in the wider context of Mosul, the change in the social situation of Mosul makes it no surprise to find a change in progress as regards the traditional sounds of MA, particularly the rhotic variable. This largely due to increased contact between Maṣlāwis and the migrants (discussed in chapter 5 above and further in chapter 11 below).

To sum up, this chapter has accounted for one of the traditional phonological variables in MA assessing a number of pre-existing statements on the occurrence of its variants while providing new aspects in this regard. The analysis has shown that both traditional variants — the uvular and vocalised — are established forms in the dialect that can occur in different linguistic contexts. Moreover, this chapter has presented aspects of social patterning of this variable in which females and lower middle class speakers appear to be maintaining the traditional forms more than their respective males and middle class counterparts. The analysis has also shown that a change in the production of these traditional variants, notably the uvular, is now underway with the young speakers sampled in the study appear to be adopting the *gelet* apical alternative. This was demonstrated by the statistically significant differences between the young and middle-aged speakers' proportions of these forms on the one hand and the old groups' on the other. The next chapter will deal with another traditional variable of MA— (q) or *qāf*.

Chapter Eight: *Qāf (q)*

8.1 Introduction

This chapter deals with the second consonantal variable in this study—*qāf* or (q). It concerns the realisation of this variable as one of the variants (i.e. [q], [g], [k], [dʒ] and [ɣ]) that exist in Iraqi Arabic (described later in this chapter). In this study, I examine a number of linguistic and non-linguistic constraints on its behaviour in MA.

Hachimi (2005, p. 124) remarks that this variable is of social, geographical and stylistic connotations in Arabic dialects. Hachimi also points out that the early scholars of linguistics of the pre-Islamic era used the various forms of this variable to demarcate Arabic dialects. Modern Arabic dialects are still being differentiated according to the realisation of certain sounds and this particular variable is a case in point. A good example can be found in Palestinian dialects in which the dialects of Jerusalem and those in West Bank are differentiated by labelling them as [ʔ] dialects and [k] dialects respectively (Al-Wer and Herin, 2011). Iraqi Arabic presents another example relevant to this discussion in that [q] *vs.* [g] are employed in the *gelet-qeltu* distinction of Iraqi Arabic dialects. As sketched earlier, Blanc (1964) classified the dialects of Iraqi Arabic according to some key features such as [q] and [g] with the former being a distinctive feature of *qeltu* while the latter represents *gelet*.

8.2 Previous literature on the variable

The variable (q) has been the subject of considerable scholarly attention and is now one of the most researched variables in the sociolinguistic and phonological literature on Arabic (Al-Ani, 1976b; Al-Wer and Herin, 2011). There are different views on the genesis and development of the forms of this variable. Early accounts of this variable go back to Sibawayh's influential treatise *al-kitāb* 'the book'. In this work, Sibawayh divided the consonant inventory of Arabic into two broad categories: *maǧhūra* and *mahmūsa* (i.e. voiced and voiceless respectively). Sibawayh considered /q/ as one of the *maǧhūra* sounds, which means it was presumably realised as [g]. Al-Ani (1976b, p. 49) notes that this categorisation had its impact on the subsequent literature on this variable given it was generally known to be a voiceless plosive [q] not only in Old Arabic but also in the Arabic dialects spoken at the time. This is actually reflected in the debate that followed this classic treatment of Sibawayh. In support of Sibawayh's classification, Shaheen (1987, p. 230) notes that even early reciters of the Quran used to pronounce it as *maǧhūr* (i.e. voiced[148]). Shaheen also notes that it underwent some changes that may explain why it has become *mahmūs*.

[148] Lipiński (2001, p. 137) suggests that this means 'fortis'.

The linguistic and social implications associated with this variable continue to appear in studies on Arabic dialects (e.g. Abdel-Jawad, 1981; Al-Ani, 1976b; Al-Wer and Herin, 2011; Blanc, 1964; Cadora, 1970; Daher, 1998a; Hachimi, 2005; Haeri, 1991; Salman, 2003). Hachimi (2005, p. 126) points out that the literature on this variable has revealed that it often interacts with a number of social attributes such as social class, gender, style of speaking, age and speakers' urban/Bedouin background. An example of this interaction can be found in Amman, Jordan (Abdel-Jawad, 1981) where the increase in the use of [q] was found to be proportional to other factors such as the formality of speaking style and level of education. On the other hand, the use of Bedouin-type [g] was found to be a favourite variant by some male speakers of urban and *fallāḥīn* (peasants) backgrounds. Al-Wer and Herin (2011, p. 59) note that this variant appears to have completely shifted to a glottal stop [ʔ] in some dialects of Arabic such as that in the Palestinian city of Nablus.

A number of scholars (e.g. Blanc, 1964; Cantineau, 1937; Edzard, 2006; Ferguson, 1996; Garbell, 1958; Johnstone, 1963) have discussed the historical development of this variable. There is an agreement in these studies that *qāf* has gone through several developmental stages in its history and that it has undergone a change in different modern-day Arabic dialects (Yaseen, 2015c). One of the earliest accounts on this variable by Cantineau (1934) who reported a change in the use of the local variant [q] in the face of the standard supralocal [ʔ] in the dialect of Palmyra, Syria. Another change was observed in the dialect spoken in Irbid, Jordan and other dialects in the Levant where the traditional variant [g] is being supplanted by [ʔ] (Al-Khatib, 1988, p. 87). Another account testifying to a change in this variable is by Ferguson (1996, p. 195) in which he referred to a retreat in the use of [q] in favour of other prestigious forms. Holes (1987) reported a sectarian-based change in Bahrain that involves *šīʿa* Baḥrainis adopting the urban variant of the *sunnis*' [g] at the expense of their own [q] variant.

However, while [q] has been reported to be retreating in some studies, there have been reports in the literature on an increase in the use of this variant. Hachimi (2005, p. 125) notes that this variant has increasingly "reappeared" in most modern dialects of Arabic due to the spread of mass education, which affords speakers of Arabic dialects more exposure to SA. An interesting aspect of this variable is the coexistence of different variants of this variable within the same dialect. In the next section, I will shed more light on a good example of this—Iraqi Arabic.

8.3 *Qāf* in Iraqi Arabic

In Iraqi Arabic, this variable displays a number of variants distributed between the two main dialect groups in the country: *qeltu* and *gelet*. The coexistence of different forms in IA is interesting as these forms serve as dialectal features that differentiate between both dialect groups. Historically speaking, the variation inherent in this variable goes well back in Mesopotamian history. In Akkadian language (formerly spoken in ancient Mesopotamia), [q] and [g] were not a distinguished pair of sounds (Lipiński, 2001, pp. 144-145). Edzard (2006, p. 1) suggests that the early state of affairs of this variable may prefigure its variation in modern Arabic dialects. In the next section, I will outline the variants in Iraqi Arabic.

8.3.1 Variants of (q)

Depending on the dialect and social groups that exist in the Iraqi milieu, the present-day Iraqi dialect system has five different variants of this variable. These variants are [q], [g], [k], [dʒ] and [ɣ]. The *gelet* dialect group includes all of them. Palva (2009) provides a treatment of this variable and the shared manifestations of it in *gelet* and *qeltu*. Below is an outline of the variants found in IA dialects.

8.3.1.1 [g]

Characteristically, *gelet* has a voiced velar stop [g] as in /qaːm/ → [gaːm] 'he stood'. This variant can be found across all *gelet* dialects. As will be reviewed below, this variant is not categorical in *gelet* as there are other variants in this dialect.

8.3.1.2 [q]

Another important realisation of this variable is the voiceless uvular stop [q]. This variant does exist, with varying degrees of distribution, in both *gelet* and *qeltu* with the latter having it as the categorical one. However, while [g] is the characteristic variant of *gelet*, [q] has survived in a number of word groups in this dialect. Palva (2009, pp. 18-20) list these as follows[149]:

a) This variant can be found in lexical items adopted from SA as well as words that refer to or are associated with present-day institutional usage, as in the following examples:

/qallad/ 'he copied/imitated'

/qarrar/ 'he decided'

/raːqab/ 'he watched/observed'

[149] Palva provides a long list of examples for each group. Only a sample for each is presented here.

/tˤabbaq/ ‘he applied’

/qaːran/ ‘he compared’

/qajjam/ ‘he estimated/assessed’

/niqad/ ‘he criticised’

/wiθaq/ ‘he trusted’

/θaqqaf/ ‘he educated’

/niqaðˤ/ ‘he cancelled/abolished’

b) This variant can also be found in a group of words that are part of the dialect. Palva (2009, p. 19) suggests that *gelet* speakers acquired these words from *qeltu* being the dominant dialect at a stage before the process of Bedouinisation took effect in the area. This category can be illustrated in the following examples:

/qubaðˤ/ ‘he received’/‘he collected’

/qawi/ ‘strong (m. sg.)’

/sibaːq/ ‘race’

/qaliːl/ ‘few’

/tˤariːq/ ‘way’

/qufal/ ‘he locked’

c) It is also found in minimal pairs[150], as in the following examples:

/qarrab/ ‘he caused to come near’ *vs.* /garrab/ ‘he got close’

/liħaq/ ‘he attached’ *vs.* /liħag/ ‘he followed’

d) There are also words that refer to technical terms. Examples of these words include:

/manqala/ ‘griller’

/maqʕad/ ‘seat’

8.3.1.3 [k]

Another realisation of this variable in IA is [k]. This variant can be found in *gelet* in a few words (Al-Ani, 1976b, p. 55), as can be illustrated in /waqit/ → [wakit] ‘time (n.)’ and /qital/ → [kital] ‘he killed/rebuked’.

[150] Palva (2009, p. 19) also notes that some of these may still be used in free variation.

8.3.1.4 [dʒ]

Another variant in *gelet* dialects is the affricate [dʒ]. Al-Ani (1976b, p. 55) notes that this realisation is common in the speech of *gelet* speakers of Bedouin[151] backgrounds, while it is less common in, e.g. Baghdad. Blanc (1964, p. 28) illustrates this variant in words such as /ʕaːʃiq/ → [ʕaːʃəʤ] 'in love' and /sˤadiːq/ → [sˤəʤiːʤ] 'friend'.

8.3.1.5 [ɣ]

Al-Ani (1976b, p. 54) refers to the existence of a velar fricative realisation [ɣ] of /q/[152] by non-sedentary people. This feature is not a general feature of *gelet*. However, it can be found in some villages around Baʿqūba and Ramadi. Talay (2011, p. 913) also reports this feature in šāwi *gelet* dialects. It is also common in Aḥwāzi (Khūzestāni) *gelet*. I can illustrate this variant in the following examples:

/qaːnuːn/ → [ɣaːnuːn] 'law'

/qamiːsˤ/ → [ɣamiːsˤ] 'shirt'

8.4 (q) in MA and other *qeltu* dialects

MA has the typical voiceless stop variant [q] of *qeltu* in almost all cases, with some exceptions[153]. Examples of this variant run as follows:

MA	***Gelet***	**Gloss**
[qamar]	[gumar]	'moon'
[qaːm]	[gaːm]	'he stood'

[q] is categorically realised in the *qeltu* dialects spoken in Baghdad, i.e. JBA and CBA (Abu Haidar, 1991a). It can also be found in Tikrit and Mosul. The literature suggests that the social and historical conditions of these towns helped this form to survive as these areas did not see the historical change that occurred in Baghdad over the past centuries. As will be discussed later in chapter 10, the northern part of Iraq survived the events and the consequent dialectal/language change that Baghdad had seen after the Mongol conquest.

The distribution of this variable is different in the *qeltu* dialects that belong to the Euphrates group (described in chapter 3). In towns such as Hīt and ʿĀna, [g] can be heard in many words. Al-Ani (1976b, p. 51) implied a change in those dialects stating that the development

[151] Al-Ani described them as "nomadic" and "semi-nomadic".
[152] It should be noted that there is also a reverse feature of substitution in which /ɣ/ phoneme is realised as [q] as in /ɣiːra/ → [qiːra] 'jealousy'. This realisation can also be found in Kuwaiti Arabic.
[153] As we will see later in the results section of this chapter.

of [g] there is "at an intermediate stage". Al-Ani also goes further to claim that [q] is not maintained by all the people of Mosul and Tikrit as there are certain areas in Mosul[154] where *gelet* is spoken and thus this variant exists alongside the other variants of *gelet*. Furthermore, personal communications I have had with natives of Tikrit suggest that [g] and the affricated variant [dʒ] are gaining more ground there.

8.5 Data and analysis

The variable in this study concerns the use of *qāf* in MA, which involves the potential realisation of this variable as one or more of the different variants (q, g, k, dʒ, ɣ) sketched earlier in IA. A change involving the traditional variant [q] of MA in the direction of *gelet* equivalents is assessed. The results will be then discussed in reference to Iraqi as well as other Arabic dialects, where applicable.

Using auditory analysis sketched in the previous chapters, a total of 2412 tokens were obtained from the recordings for each speaker. All instances of the lexical items that had the variable (q) within the circumscribed variable contexts were extracted and coded. However, the items where *gelet* dialects share the [q] realisation of MA (i.e. groups of words in which the default realisation is invariably [q], sketched in section 8.3.1) were not considered for investigation. A ceiling of three repetitions of each lexical item per speaker were coded. Each token was coded for each social and linguistic constraint separately. The linguistic and non-linguistic independent factors are outlined in Table 12 below.

Linguistic factors	**Levels**
Stress	Stressed, Unstressed
Syllable position	Onset, Coda
Parts of speech	Adjective, Adverb, Noun, Verb.
Non-linguistic Factors	**Levels**
Age	Old, Middle, Young
Class	Lower Middle Class, Middle Class
Gender	Female, Male

Table 12: A breakdown of fixed predictors with their respective levels for qāf.

[154] Apparently, he means those areas inhabited by the *gelet*-speaking residents of Mosul (i.e. *ǧaryāwi* people).

8.6 Results

This section presents the results of the *qāf* (q) variable. As will be detailed below, the speakers produced the traditional [q] variant almost categorically. Therefore, no statistical treatment was conducted and the subsections below will deal with the distributions of the variants produced across each linguistic and social factor coded for this variable.

8.6.1 Overall distribution of variants

This section concerns the results emerging from the use of this variable in MA. In terms of variation, results have revealed little variability in the production of this variable in MA. The speakers sampled in this study had an almost categorical use of the traditional uvular plosive [q] for this variable. Figure 14 below provides an overall distribution of the variants produced by all speakers in number and percentage terms. The clear pattern observable from this figure is that [q] appears to be the dominant form accounting for 98% of the 2412 tokens while the [g] form is the clear minority as it accounted for remaining 2% of the total use. It can also be seen that the other variants of this variable in Iraqi Arabic, i.e. [k], [dʒ] and [ɣ] were not produced by all the speakers of this study. The next two sections will present the distribution of variants produced across the linguistic and social factors coded for this variable.

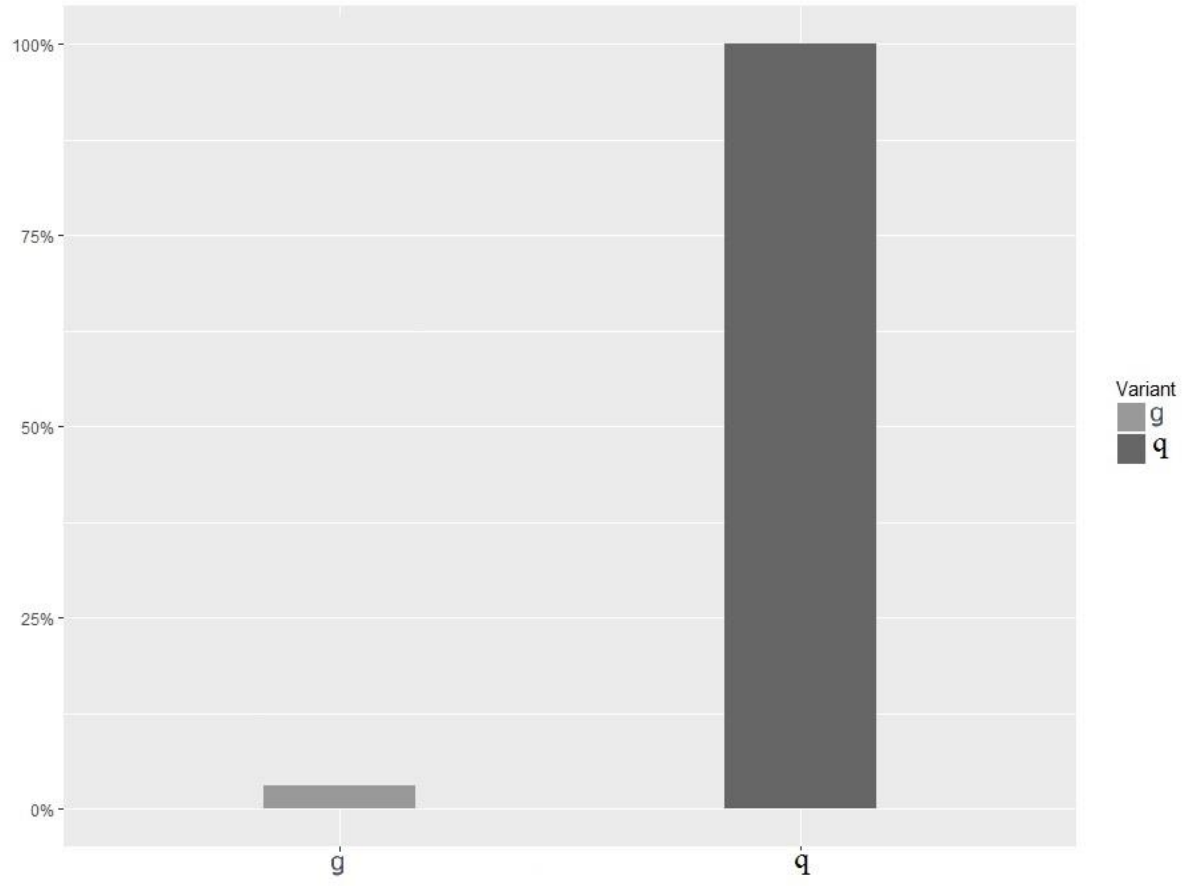


Figure 14: The overall distribution of variants of qāf.

8.6.2 Distributions across linguistic factors

In terms of the distribution of (q) variants across the different factors coded for this study, the speakers have shown little variation in each factor. In the part of speech factor, it can be seen from Figure 15 below that the realisation of this variable was predominantly produced as [q] across the categories coded for the analysis. The values ranged from 95% in adverbs to 100% in adjectives. The use of the supralocal [ɡ] was distributed varyingly across the different factors, with the highest proportion produced in adverbs at 5%. The results also revealed that there are words in this dialect where this variable is categorically realised as a velar plosive [g]. These words are [garaːjəb] 'relatives', [geːwəl] 'desire', [guːnəjjaˑ] 'sack (n.)' and [gaweːni] 'a pack of sacks'. There is a possible explanation for this finding is that these words are likely adoptions from *gelet* as it seems that MA has no alternatives in its lexicon although we lack previous research on the behaviour of (q) to verify such an explanation.

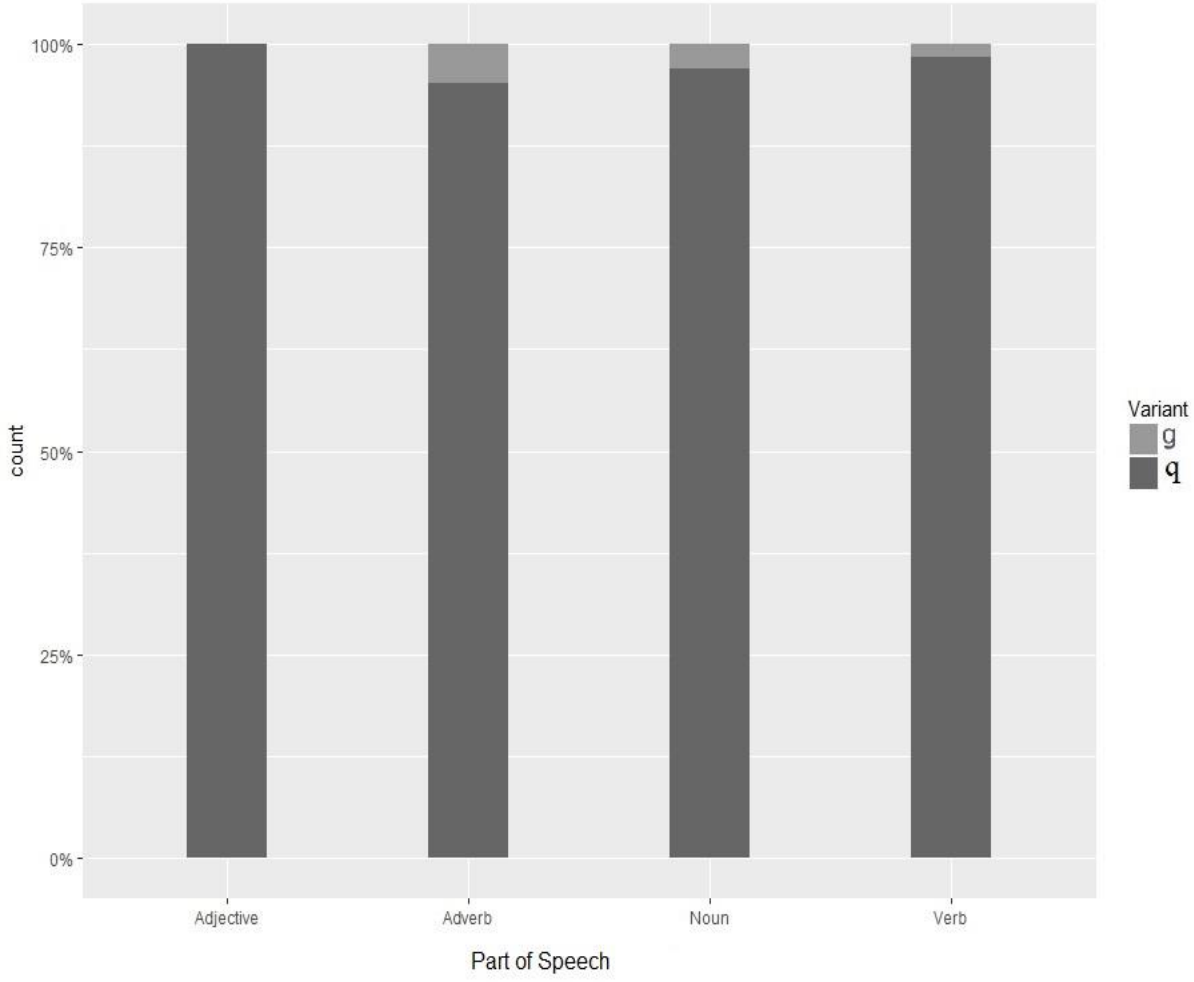


Figure 15: The distribution of variants of qāf by part of speech.

In syllable position, the traditional [q] was also predominantly present in all the three syllable positions. Figure 16 below illustrates the distribution of both the traditional and supralocal

variants in gemination, onset and coda positions. The traditional form accounted for 99%, 97% and 99% of these positions respectively. The marginal proportion of supralocal variant [g] was produced mostly in onset positions at 3%.

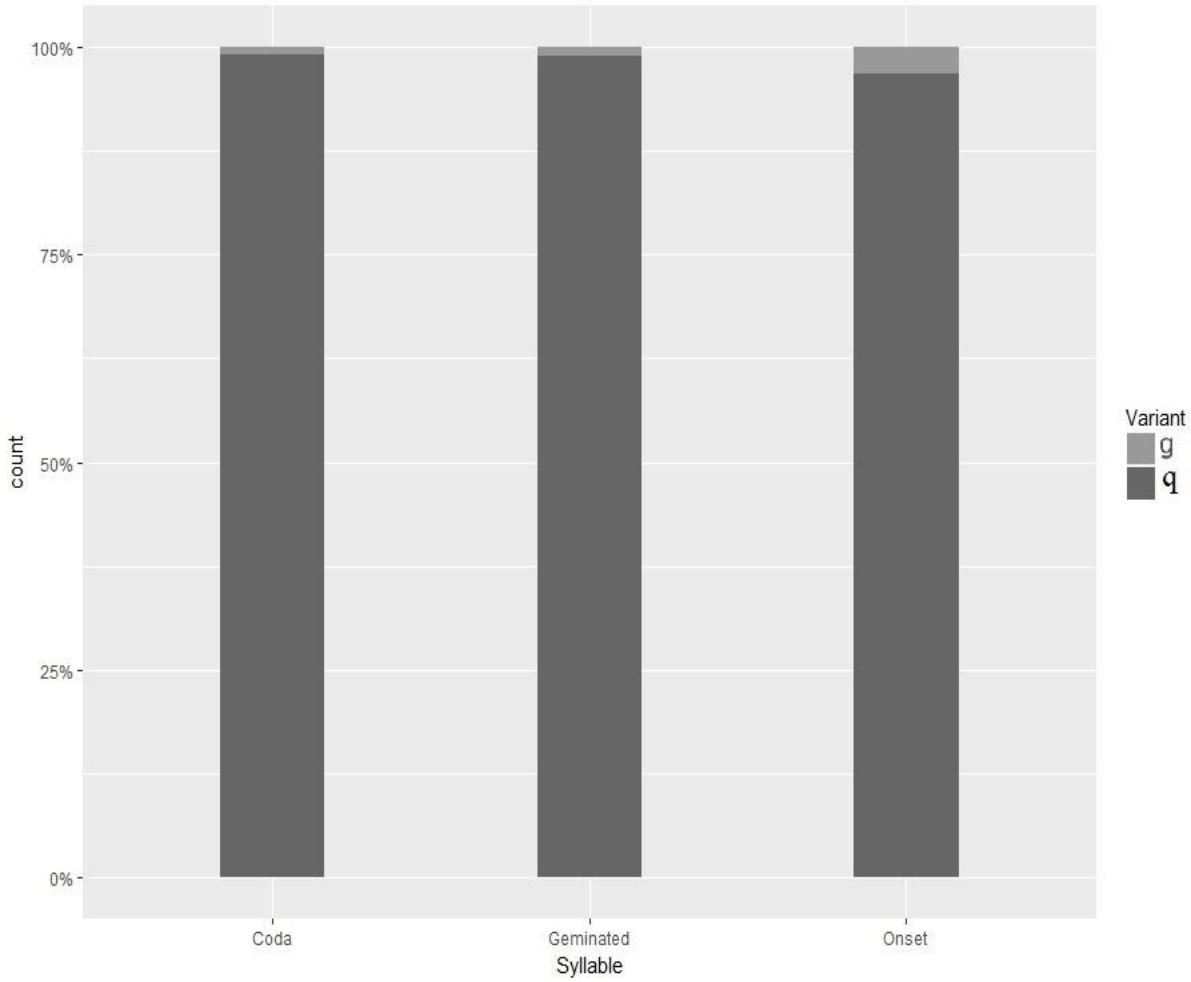


Figure 16: The distribution of variants of qāf by syllable position.

In stress positions, (Figure 17 below) the distribution generally was no different to the other linguistic factors in that the traditional variant [q] was predominantly present in both stressed and unstressed positions at 98% and 97% respectively. The marginal proportion of supralocal variant [g] formed only 2% (28 tokens) and 3% (26 tokens) in both stressed and unstressed positions respectively.

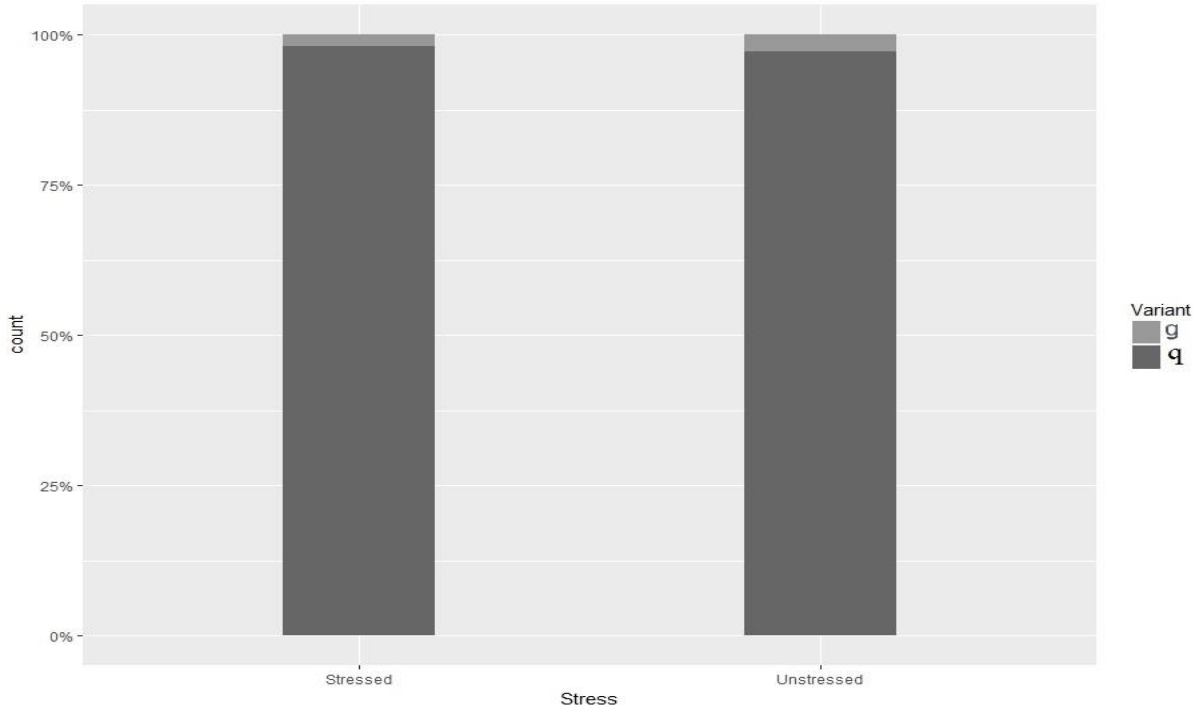


Figure 17: The distribution of variants of qāf by stress.

8.6.3 Distributions across social factors

With the distributions of the variants of this variable across the linguistic factors are in place, this section presents the distributions of these variants across the social factors. Figure 18 below illustrates the distributions of both variants by the age cohorts sampled. It is apparent that all speakers, old, middle-aged and young, produced the traditional variant predominantly in their speech in proportions that ranged from 95% by the young group to 99% by the old group. This means there is no change in apparent time in the use of this variable in MA. The supralocal variant [g] was produced in small proportions by the speakers. The young group used it most, but it still only accounted for 5% of their tokens.

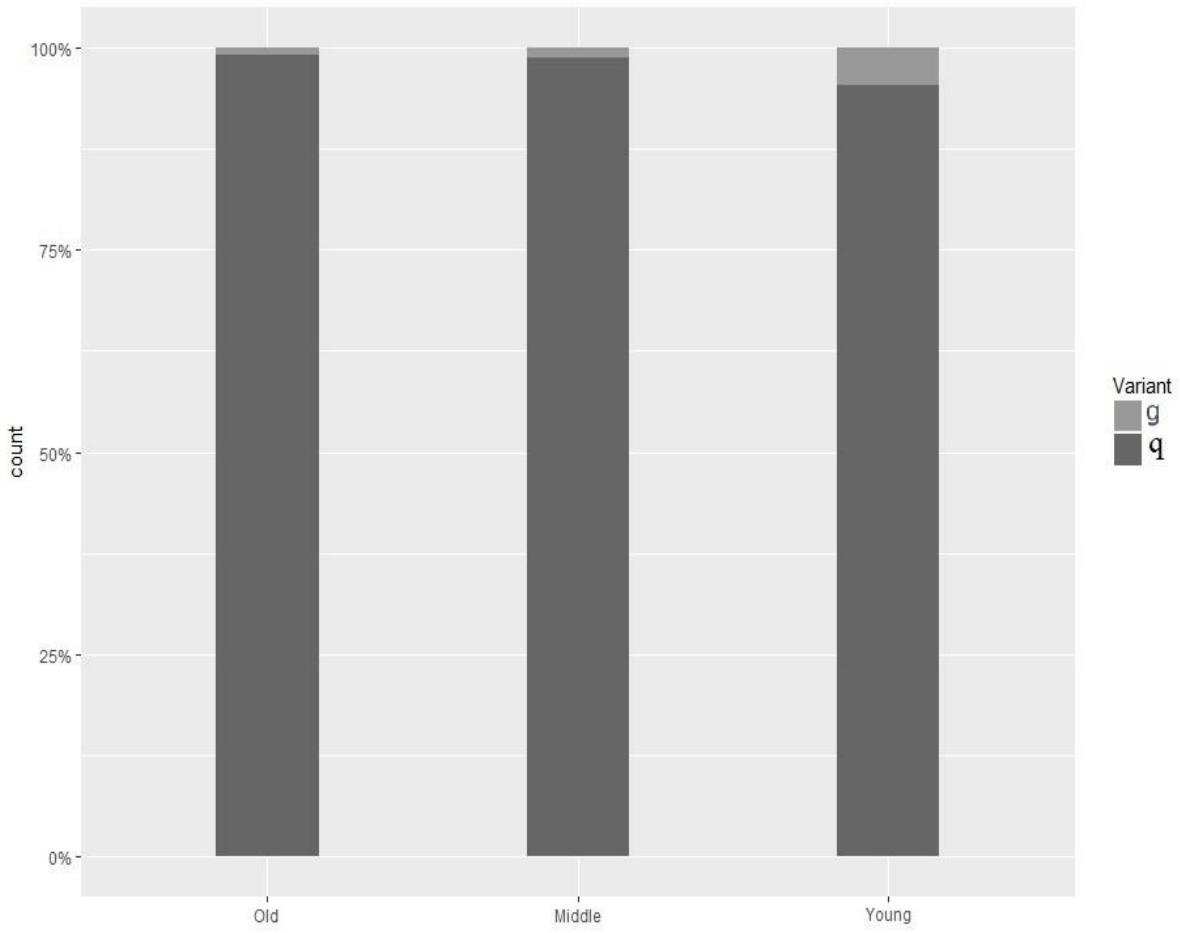


Figure 18: The distribution of variants of qāf by age.

In gender, there was also a similar pattern to that of age in which this variable was produced with little variation by both gender categories. Figure 19 below shows that both female and male speakers produced the traditional variant [q] in high proportions at 100% and 96% respectively.

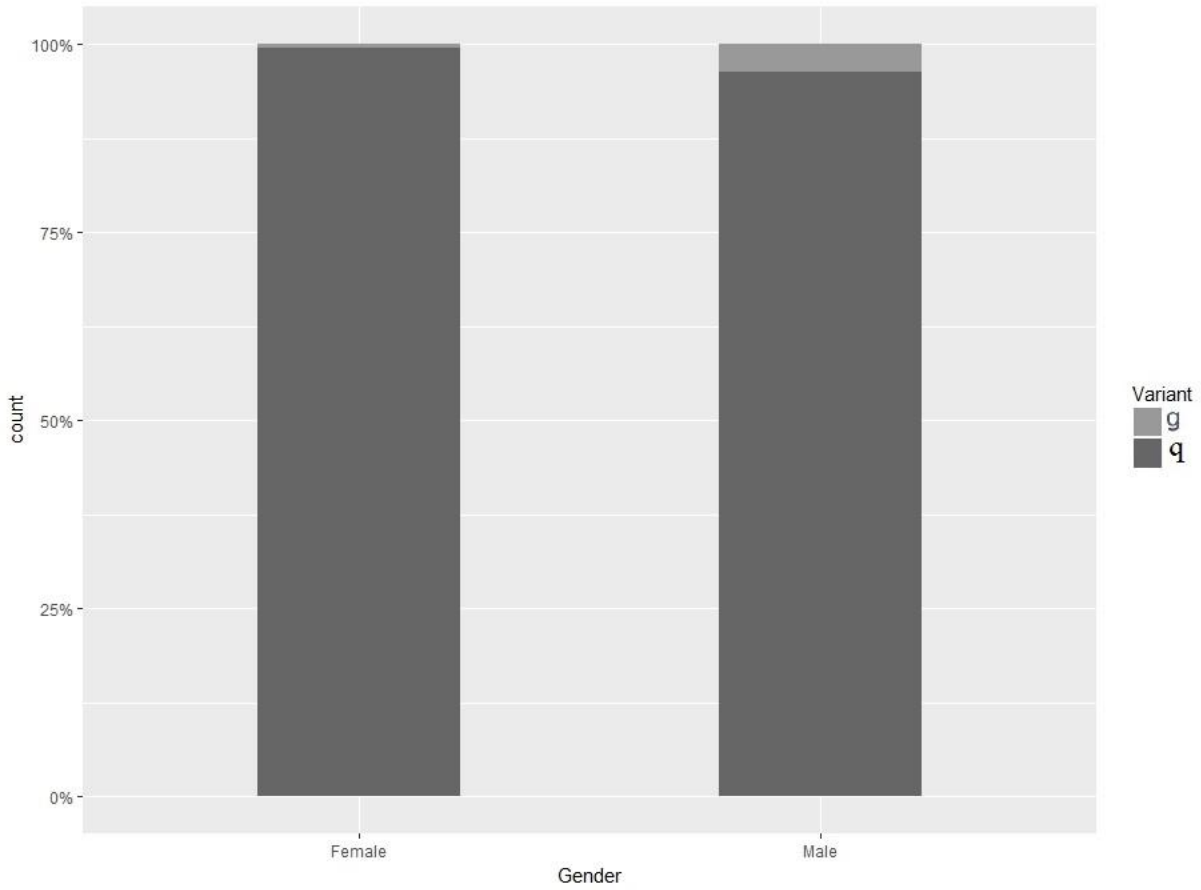


Figure 19: The distribution of variants of qāf by gender.

In terms of class, speakers of both class categories produced the traditional variant predominantly (Figure 20 below) at 97% and 99% for the middle class and lower middle class respectively. The former group produced slightly more instances (38 out of 1105 tokens) of the supralocal [g] at 3%. From the distribution of the variants across the social factors, it appears that all the speakers, regardless of their age, gender or class, favour the traditional form. The next section will bring together the results emerging from the analysis and discuss them.

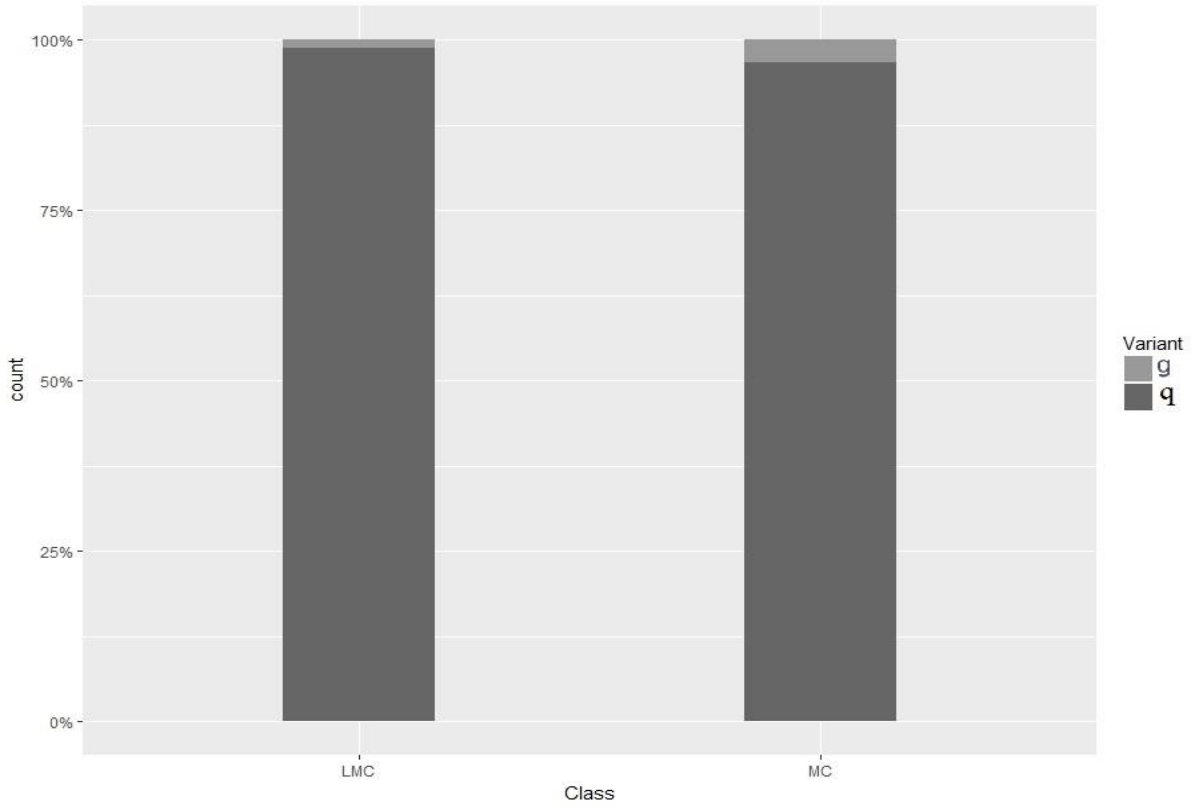


Figure 20: The distribution of variants of qāf by class.

8.7 Discussion and concluding remarks

As has been seen in the spread of the data, this variable shows little variability in both linguistic and social factors. The traditional variant was predominantly produced across the linguistic factors and their levels. Likewise, the social factors have, more or less, shown a similar trend in which speakers of both class and gender categories have favoured the traditional form in the use of this variable. This variable also does not show a change in apparent time in its behaviour in that Maṣlāwis appear to be preserving the traditional realisation [q]. This was evidenced by the high rates of this variant compared to marginal proportions of the supralocal variant produced by the three age cohorts sampled in this study. Generally, Kerswill and Williams (2002, p. 81) point out that the uniqueness and the underlying factors of each case of language change make it difficult to predict the outcome expected from each. In fact, a look at the literature reveals that, in contact-induced linguistic changes, we may see a change in some of the features while not in others. A good example may be found in this variable in which although a change has been reported in a number of Arabic dialects (e.g. Jordan, Morocco and Syria), it does not seem to be found in all areas. This is because the development of variants depends on a number of factors that affect the speech of communities. While some traditional variants of this variable, particularly [q], have been reported to be disappearing in some dialects, it has been reported to be showing some

resurgence or maintenance in others. Hachimi (2005, p. 125) suggests that the retention of [q] can be ascribed to the availability of mass education, which seems to play an important role in its resurgence. This trend was found in Baghdad where [q] was reported to be increasingly used by Bedouin-type residents of the city at the expense of their *gelet* [g] and [dʒ] forms (Abu Haidar, 1987). Abu Haidar (1987, p. 56) cites the increase of education availability behind the ascendency of SA[155] among Bedouin-type communities. Moreover, as I will discuss in more detail in chapter 11, the people who have migrated to Mosul have spread throughout Mosul's society and increasing education has become available to all. Moreover, this variant does already exist in the speech of those migrants. With these conditions and [q] being in the ascendency in Iraqi *gelet*, the retention of this variant in MA may not be surprising. However, the fact that there are instances of [g], albeit statistically insignificant, in the speech of young Maṣlāwis, may indicate an incipient change. In all probability, if a change were to take place, it would be partial rather than complete as this particular variant [q] has never been lost even in *gelet* (that being the dialect most influencing MA now). In fact, looking at the history of the dialect formation of Iraqi Arabic, this variable has not seen a complete loss of any of its variants. Rather, a number of koineisation processes (mixing, Bedouinisation and sedentarisation) have contributed to the coexistence of different variants of this variable in Iraqi Arabic.

To sum up, this chapter has cast light on *qāf*, an important variable of Arabic in general and of Iraqi Arabic and Maṣlāwi Arabic in particular. It reviewed the main literature on its existence and the distribution of different forms in Iraq. The analysis of the dataset revealed that this variable shows little variability in the speech of Maṣlāwis who produced high proportions of the traditional [q]. Visualised distributions of the variants across the linguistic and social factors illustrated this trend with slightly marginal differences. In terms of change, this variable appears to be stable over time although there were some supralocal realisations, which were not statistically significant to be described as a change. The patterns of this variable will be put in the wider context of all the variables in this study later in chapter 11 to draw the big picture of MA. This chapter concluded the investigation of the two consonantal variables intended for this study and the next chapter will start with the first of two vocalic variables: /uː/ or the MOSUL vowel.

[155] She reasons that the increase in the use of [q] in her informants stems from their increasing exposure to SA through education.

Chapter Nine: the MOSUL vowel

9.1 Introduction

The previous two chapters presented an investigation of two consonant variables in MA. The present chapter is the first of two analyses of vocalic variation and change in this dialect. It addresses another traditional feature in Mosul concerning the variable /uː/. Along with other sounds under scrutiny in this study, investigating the traditional vocalic variation will help provide an overview of variation in the phonological system of MA. It will also contribute to our understanding of how MA is taking shape under the recent social/demographic changes that have occurred in the city of Mosul.

In this chapter, I present a review of the variable and the relevant research followed by a description of the methods used in the analysis of this variable. A presentation of the results of the statistical design is also given. This chapter then presents a discussion of these findings and some concluding remarks.

9.2 An overview of the variable

Before accounting for this variable in Mosul, a brief comment on its occurrence in IA in general is given. As shown earlier in chapter 2, one of the long vowels that exist in the system of Iraqi Arabic is /uː/. The common realisation of this vowel in IA is close, back long vowel with a slight allophonic difference when it comes in the contiguity of emphatic as against non-emphatic sounds (Erwin, 1963, p. 24).

In MA, /uː/ is lowered to [oː] as in /suːq/ → [soːq] 'market'. This is one of the distinctive features that can be found in *qeltu*, not least in Mosul. Blanc (1964, p. 41) remarks that this feature is not categorical mentioning two exceptions in the following verbs: [asuːq] 'I convey' and [abuːq] 'I steal'. Blanc also admits his lack of data to formulate a statement on the nature of variation involved in this feature. This feature is often mentioned in the literature on *qeltu* in general, largely in passing and without detailed analysis. Abu Haidar (1991a, p. 27) remarks that [oː] was first reported by Oussani (1901, p. 101) in Christian Baghdadi Arabic as a feature that results from the influence of the adjacent consonants[156]. Later studies (e.g. Blanc, 1964; Jastrow, 1994, 2006d) have noted that /uː/ and /iː/ are realised as [oː] and [eː] respectively in the contiguity of gutturals, as in *xuyūṭ* [xəjoːtˁ] 'threads' and *daqīq* [daqeːq] 'flour' (Jastrow, 2006d, p. 417). Abu Haidar (1991a, p. 18) remarks that this feature can be found more commonly in CBA than in JBA. Talay (2011, p. 913) mentions this realisation in

[156] Oussani provides no further note on the type of those consonants although the examples he cites are all of guttural environments.

the *qeltu* dialects spoken by the Jews in northern Iraq. Jastrow (1978a, p. 63) also notes that this feature exists in Anatolian dialects.

Thus, what we have is a feature with a number of mentions in the literature. The consensus in the studies cited is that it results from the lowering of /uː/ in the contiguity of a guttural sound. The remainder of this chapter will account for how the study investigated this variable and the results emerged from the analysis.

9.3 The variable in this study

Against the background of the variable sketched in the previous section and the change expected in MA, it is felt that a further investigation into this variable is needed. This is further motivated by the fact that little is known about the linguistic and social variables that might condition it. This chapter seeks to employ the dataset collected for this study to elucidate the type of structured variation that exists in the quality and quantity of this vowel in relation to a set of linguistic and social constraints.

In line with the aims of this study, a chief motive of the analysis of this variable is to detect an anticipated change in apparent time in its production in MA. As sketched earlier, the descriptions and observations we have on this vowel show us that this variable in MA is realised as [oː], which is different to the *gelet* high back realisation [uː] dominant in the rest of the country. Therefore, the apparent time hypothesis in the present study predicts a change in this vowel towards a *gelet*-type high back quality of the vowel with the expectation that younger speakers of Mosul will be leading the way. This chapter tries to assess the conditions at play in governing the use/alternation involved in the production of this variable. In the process, previous statements will be assessed to see if the data of this study can lend support to them.

9.3 Analysis and coding protocol

The treatment and analysis of the data extracted for this variable followed the procedures of the acoustic analysis described in the methodology chapter. A total of 1995 tokens were segmented and annotated using a Praat script that measured the duration as well as the first two formants (F1, F2) for each token. The measurements obtained for this vowel were then entered into an excel spreadsheet for coding in preparation for the statistical analysis.

Considering the descriptions in the literature and the research aims of this study, each token was coded for the social factors: age, gender and social class. The linguistic factors included the parts of speech and phonological context (preceding and following). As we have seen earlier, previous studies of the vowel assumed the adjacency of a certain type of sounds,

notably gutturals, for the occurrence of [oː]. Therefore, this factor was deemed worthy of further investigation to include the sounds that precede and follow this vowel to shed more light on how neighbouring environments condition this variable. All tokens from SA were not considered from analysis since their default realisation is categorically [uː]. As described in chapter 2, long vowels lie in stressed positions in Iraqi Arabic. Given the categoricity of stress status of this vowel (i.e. occurring always in stressed positions for being a long vowel), stress was not considered as an independent predictor for this variable.

As is the case with all variables in this study, the three social parameters were also coded for this variable. The aim of including these factors are no different than the other variables. This is to see how the different realisations of this variable pattern across the stratified social categories in this study to discern the social profile of this variable tracking any change across the generations sampled. Table 13 below lists the predictors along with their respective sublevels that were coded for this variable. Each token was coded for each of these factors and then all were analysed acoustically and tested statistically. The above has given an overview of the analysis and what has and has not been coded, the next section will deal with results of the statistical treatment of the analysed tokens.

Linguistic factors	**Levels**
Preceding sound	Uvular, Emphatic, Pharyngeal, Non-guttural sound.
Following sound	Uvular, Emphatic, Pharyngeal, Non-guttural sound.
Part of speech	Adjective, Noun, Verb
Social Factors	**Levels**
Age	Old, Middle, Young
Class	Lower Middle Class, Middle Class
Gender	Female, Male

Table 13: The independent factors (*predictors*) *and the respective levels for each.*

9.4 Results

This section deals with the results obtained from the analysis of the MOSUL variable. The presentation of the results can be outlined as follows: a general overview of observations captured as regards the variable is presented. There follows the statistical modelling of the duration and formants of the variable in which the Rbrul models built for each response are presented. Boxplots were used for the presentation of the results of both duration and formants since their analysis was carried out through a continuous measure. Hay (2011) recommends using boxplots as one of the best practices in visualising a continuous dependent

variable as it allows researchers to show the range of data (e.g. spread and outliers). Boxplots display a number of aspects of the data. It gives the middle line (i.e. median), which refers to where most of the data points clustered in the production of the response. Boxplots also display the upper and lower inter-quartiles, the length of which represents the spread of the data.

9.4.1 General observations

As sketched earlier, an initial task was to see if previous statements are indeed at play in the articulation of this vowel in MA. Therefore, looking at the data of this study, a number of related observations can be stated on the behaviour of this vowel. It was found that the traditional [oː] realisation is not solely limited to the environment of gutturals, as was suggested in previous studies (e.g. Jastrow, 1994; Oussani, 1901) and that it can occur in other environments. The data have shown us that [oː] is an across-the-board realisation that can occur before and after different non-guttural sounds as instanced in the following examples:

Word	**Preceding sound**	**Following sound**	**Gloss**
[tfoːʁ]	[+labiodental]	[+uvular]	‘it boils’
[yəbkoːn]	[+velar]	[+alveolar]	‘they cry’
[tmoːt]	[+bilabial]	[+alveolar]	‘she dies’
[falloːhaˑ]	[+alveolar]	[+glottal]	‘they unfastened it’

Recall that verbs such as [asuːq] ‘I convey’ and [abuːq] ‘I steal’ have been reported as contexts in which this form does not occur (Blanc, 1964, p. 41). However, the data revealed that it can occur in different verb conjugations (examples below) although it should be noted that these two verbs, in particular, were not produced by any of the speakers sampled in this study.

What these findings tell us is that this realisation occurs in all possible positions and that presence of a guttural sound whether in close proximity or anywhere in the token is not a condition for this realisation to occur in MA. The next section will deal with this variable in more depth giving a statistical treatment of the different linguistic and social factors coded for its analysis.

9.4.2 Statistical modelling

We come now to the statistical treatment of this variable accounting for the different factors that may influence the use of its different realisations to the level of significance. In the subsections below, I will treat each model built for the analysis individually.

A mixed-effect step-wise regression analysis was performed in Rbrul. This included the linguistic and social factors outlined earlier as fixed predictors while speaker and token were set as random effects. I also checked for two-way interactions between social factors (age, gender, class) to see how the stratified groups behave in the production of this variable. For example, to see if (if so which) particular group is leading the change expected in the Maṣlāwi pronunciation of this vowel. Before discussing these models, I will first give an overview of the output of the mixed-effect model that Rbrul provides for this type of analysis with an explanation of the format and values therein.

9.4.3 General overview of Rbrul output

Rbrul produces a table (e.g. Table 15 below) that provides information about several aspects of the model. It reports the factor groups in descending order of significance (α= .05) with the *p*-values given next to each factor in the first column. The *p*-values indicate whether or not the influence of that factor on the variability is significant. These significant predictors (i.e. the ones that improve the design) with their factor levels are also deconstructed in the table. These are ranked in descending order from that in which the response (i.e. duration, F1, or F2) is most likely favoured and down to the level that is less so. This is also indicated by the coefficients computed by the regression model. The levels returned with a positive coefficient value indicate higher scores for the response in/by that level while the reverse is true of the factors returned with negative coefficient values. The model output also displays other aspects of the model such as the number of individual tokens for each level within a factor (e.g number of tokens for each age cohort within the age factor). It also reports the model's estimated mean for each factor level. Holmes-Elliott (2015, p. 115) notes that this estimated mean value is computed for the level "once the other factors had been taken into account". These details will be exemplified in the discussion of the actual tables for the regression models performed for this variable. These will come in the next section about the results.

9.4.4 Statistical results

The statistical runs incorporated all the linguistic and social factors coded for this variable, as outlined in Table 14 below. The table lists the fixed and random predictors as well as the

interaction terms checked between the factors. The next sections will describe each model and its results individually.

Fixed Predictors	Interactions	Random Predictors
Preceding sound	Age*Gender	Speaker
Following sound	Age*Class	Token
Part of speech	Gender*Class	
Age		
Class		
Gender		

Table 14: Fixed and random predictors and interaction terms incorporated in Rbrul modelling for the MOSUL vowel.

9.4.5 Duration

The first run concerns the duration and incorporates all the linguistic and social factors. Table 15 above shows the results of the stepwise regression run of the duration of the MOSUL vowel.

Factor		Coef	Tokens	Mean
Age	Old	8.053	621	104.549
	Middle	-2.751	699	93.270
	Young	-5.302	675	91.206
Gender	Female	4.308	964	100.552
	Male	-4.308	1031	91.904
Speaker mean	96.083			
Intercept	96.307			
Df	6			
Tokens Total	1995			
Non-significant factors (dropped from best model)				
Class	MC	[N.S.]	1157	98.632
	LMC	[N.S.]	838	94.236
Preceding Sound	Affricate	[N.S.]	76	91.368
	Approximant	[N.S.]	411	93.299
	Emphatic	[N.S.]	142	99.746
	Fricative	[N.S.]	251	99.398
	Nasal	[N.S.]	276	96.243
	Pharyngeal	[N.S.]	141	100.113
	Stop	[N.S.]	427	96.651
	Uvular	[N.S.]	271	93.48
Following Sound	Approximant	[N.S.]	193	94.497
	Emphatic	[N.S.]	114	96.035
	Fricative	[N.S.]	294	96.803
	Nasal	[N.S.]	980	96.155
	Pharyngeal	[N.S.]	164	94.091
	Stop	[N.S.]	96	96.583
	Uvular	[N.S.]	154	98.078
Part of Speech	Adjective	[N.S.]	138	89.964
	Noun	[N.S.]	462	96.684
	Verb	[N.S.]	1395	96.489

Table 15: Results of Rbrul model for the duration of MOSUL.

We can see from the table that the duration of this vowel shows a generational difference in that young and middle-aged speakers used shorter versions of the vowel than their old peers. This was statistically significant with negative coefficients (-5.302 and -2.751 respectively) for the former two groups compared to the latter's positive coefficient and mean value of 104.549 ms. This indicates a change in apparent time in the duration of the MOSUL vowel. Figure 21 below shows the spread of the duration measures of the MOSUL vowel across the age cohorts. We can see that the individual plots of the cohorts show a downward trajectory from the old group down to the middle and young groups. The latter two groups have relatively lower boxplots and medians compared to the old speakers. This indicates that the duration of this vowel is decreasing in apparent time over the course of the three generations.

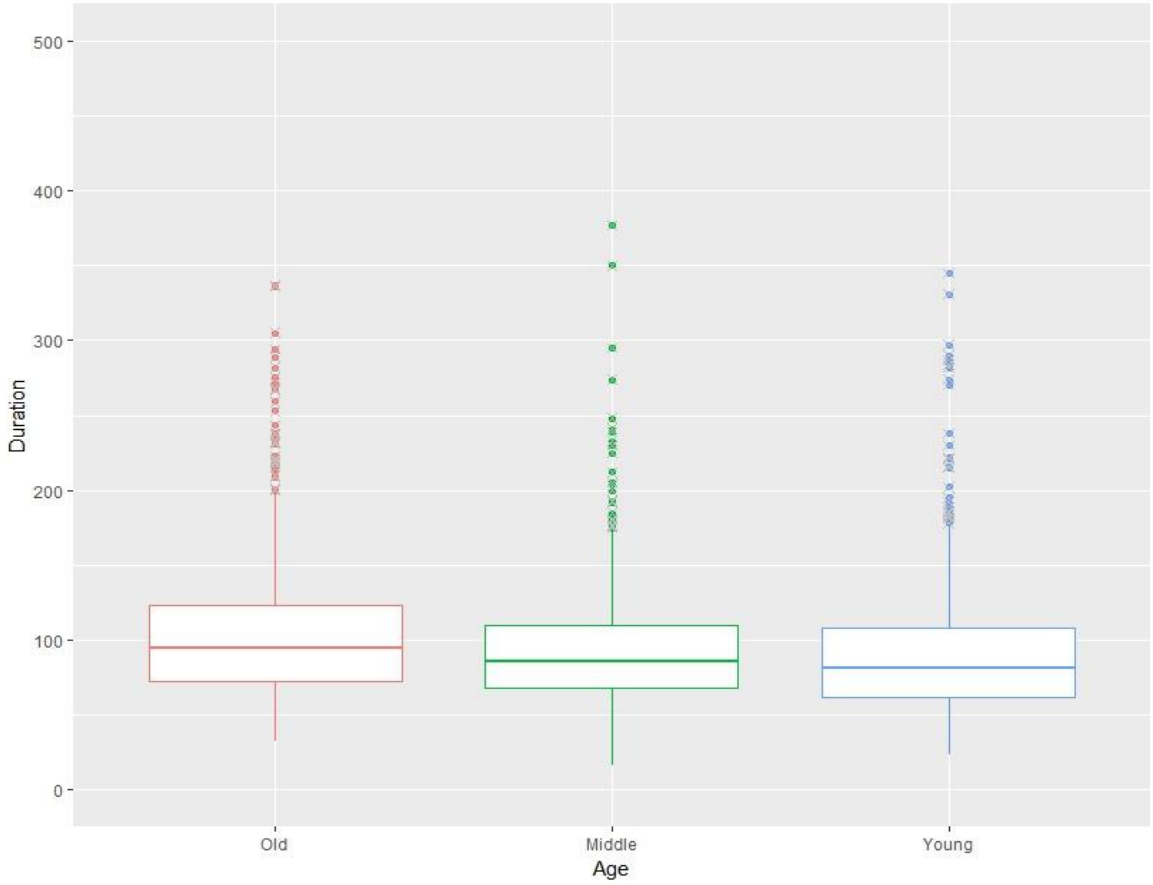


Figure 21: The spread of duration of the MOSUL vowel by age.

We can also see from Table 15 that Rbrul returned a significant gender pattern. Females had longer realisations of this vowel than their male counterparts. This stood at a coefficient of 4.308 and a mean value of 100.552 ms while it was produced shorter by males with a negative coefficient of -4.308 and a mean value of 91.904 ms. Figure 22 below shows the duration of the two broad groups: females and males. As can be seen from this figure, females had a visibly higher boxplot than that of males with a higher average median of the duration of this vowel compared to males whose lower boxplot indicates a shorter version of the vowel.

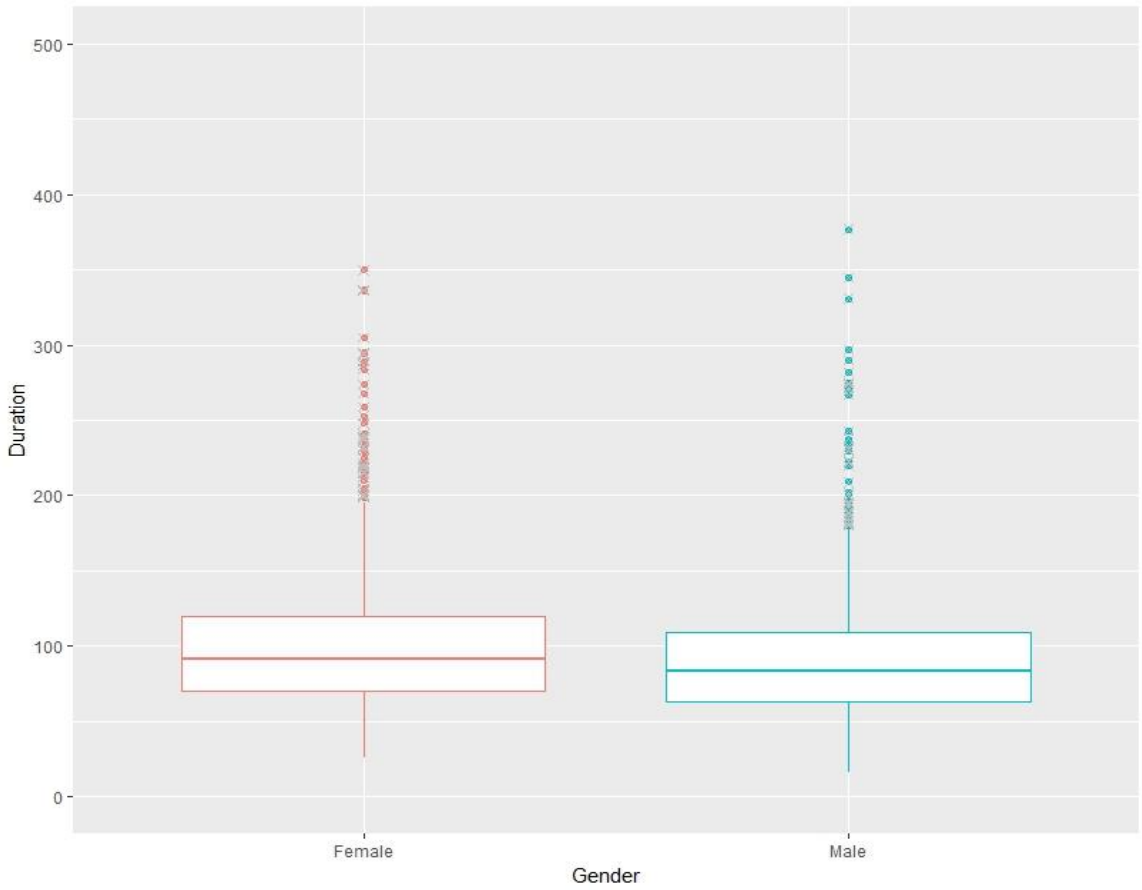


Figure 22: The spread of duration of the MOSUL vowel by gender.

In terms of class, it can be seen from the slightly different boxplots in Figure 23 below that LMC speakers produced a relatively shorter version of this vowel with a slightly lower boxplot and an average of 94 ms compared to MC speakers. The latter group had an average of 98.632 ms. However, class was not returned as significant for the duration of this vowel.

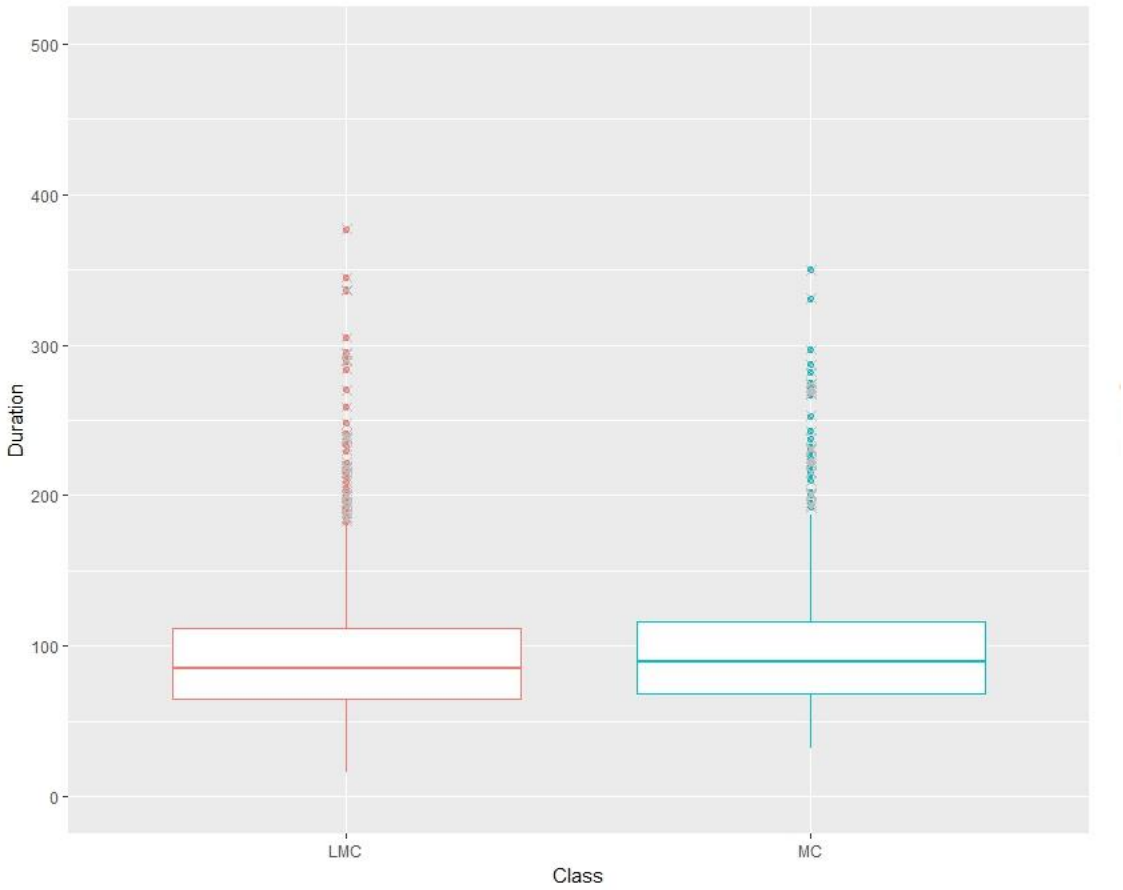


Figure 23: The spread of duration of the MOSUL vowel by class.

To compare the three social predictors, Figure 24 below displays the duration of this vowel by age, gender and class. It can be seen that the first, third, fourth and seventh plots from the left are relatively higher than the rest. This indicates that these groups had relatively longer durations of this vowel than the other groups. Three of these four groups involve female and MC speakers. While the class-related pattern in this dimension may run counter to other variables in which MC speakers tend to use supralocal realisations, the gender pattern is consistent with that observed so far in which female speakers tend to preserve the traditional realisations in their speech. Three of these groups are within the old cohort, which is also in line with the overall age-related trend observed in which old speakers tend to produce the traditional form(s) of the variables. However, these interactions were not found significant and it can be seen that most of the boxplots are more or less similar with no radical differences between them

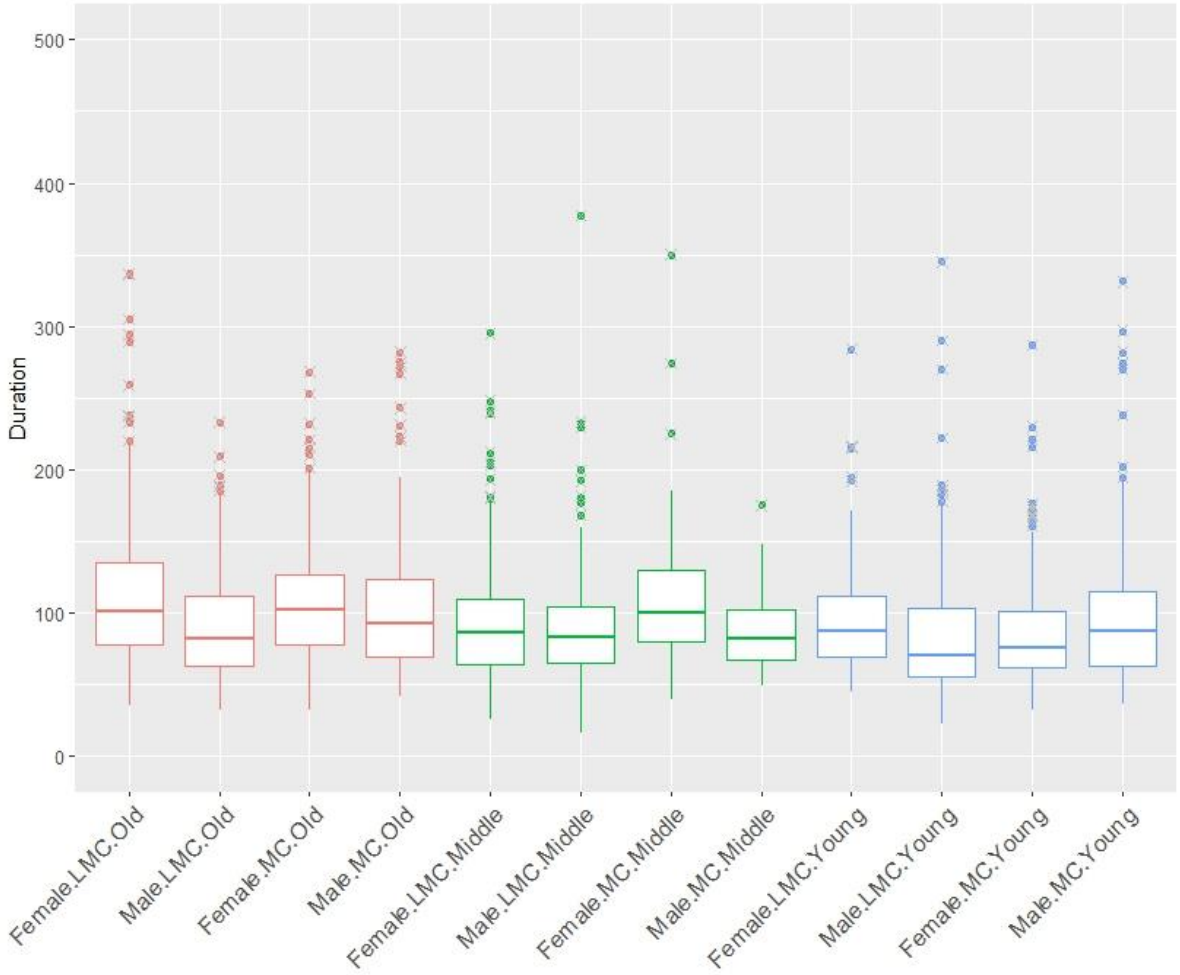


Figure 24: The spread of duration of the MOSUL vowel by age, gender and class.

9.4.6 Formants

This section deals with the statistical treatment of the height and advancement of this vowel. As sketched in the methodology chapter, I measured the first two formants (F1 and F2) of the MOSUL vowel taken at a single point (durational mid-point) of the vowel. F1 corresponds to vowel height, which is inversely proportional to the value of F1. The lower F1 value, the higher the articulation of the vowel as the tongue position is raised. By the same token, the higher F1 value, the lower the articulation of the vowel as the tongue's position moves lower in the oral cavity. F2 corresponds to vowel advancement (frontness and backness). The relationship between F2 and advancement of the vowel is directly proportional. Higher F2 values represent a fronter tongue position (i.e. front vowels) while F2 decreases as vowels are produced more to the back of tongue position.

Table 16 and Table 17 shown below display the Rbrul runs pertaining to both the first and second formant respectively. The significant factors resulting from the step-down analysis are listed in descending order in the first part of the table with a break-down of related values

such as the linear coefficients, the number of tokens and the durational mean listed next to each factor level. The levels returned with positive coefficients correspond to an increase in F1 values in those levels, which in turn corresponds to a lowering of the MOSUL vowel's height. On the other hand, levels returned with negative coefficients correspond to a decrease in F1 values, which in turn indicates a raising of this vowel's height. The second part of the table lists the factors returned as insignificant.

9.4.6.1 First formant

Factor		Coef	Tokens	Mean
Age	Old	50.464	621	509.424
	Middle	-1.750	699	457.101
	Young	-48.714	675	407.776
Speaker mean	456.699			
Intercept	459.266			
Df	5			
Tokens Total	1995			
Non-significant factors (dropped from best model)				
Gender	Female	[N.S.]	964	474.121
	Male	[N.S.]	1031	464.218
Class	LMC	[N.S.]	1157	474.032
	MC	[N.S.]	838	462.06
Part of Speech	Adjective	[N.S.]	138	473.45
	Noun	[N.S.]	462	470.276
	Verb	[N.S.]	1395	468.141
Preceding Sound	Affricate	[N.S.]	76	477.994
	Approximant	[N.S.]	411	467.819
	Emphatic	[N.S.]	142	474.261
	Fricative	[N.S.]	251	467.528
	Nasal	[N.S.]	276	465.278
	Pharyngeal	[N.S.]	141	477.186
	Stop	[N.S.]	427	469.979
	Uvular	[N.S.]	271	464.887
Following Sound	Approximant	[N.S.]	193	475.033
	Emphatic	[N.S.]	114	459.675
	Fricative	[N.S.]	294	471.383
	Nasal	[N.S.]	980	469.162
	Pharyngeal	[N.S.]	164	462.952
	Stop	[N.S.]	96	458.479
	Uvular	[N.S.]	154	475.801

Table 16:Results of Rbrul model for MOSUL*'s vowel height.*

It can be seen from Table 16 above that the height of MOSUL is conditioned by age. In this factor, the young and middle-aged speakers appear to be significantly using higher versions of the vowel than their old counterparts. This is shown by the negative coefficients and lower mean values for these two groups compared to those of the old group who had a positive coefficient and a higher mean value of MOSUL's F1. This clearly indicates that the height of this vowel is undergoing a change in apparent time. Figure 25 below displays the spread of F1 values across the age cohorts. The individual plots show a descending trend (in interquartile and median terms) from the old group down to the middle and further down to the young group. It can also be seen that the interquartile (which represents the middle 50% of scores) of the middle-aged groups is slightly taller than the other two, which indicates a more variable spread of scores of MOSUL's height. The young and old groups have narrower inter-quartile ranges, which indicate an overall focused production in terms of MOSUL's height. The production of the MOSUL's height by the young and middle-aged groups was significantly higher compared to the old group. These findings indicate that the height of this vowel is undergoing a change across generations in which it is becoming higher than it traditionally used to be.

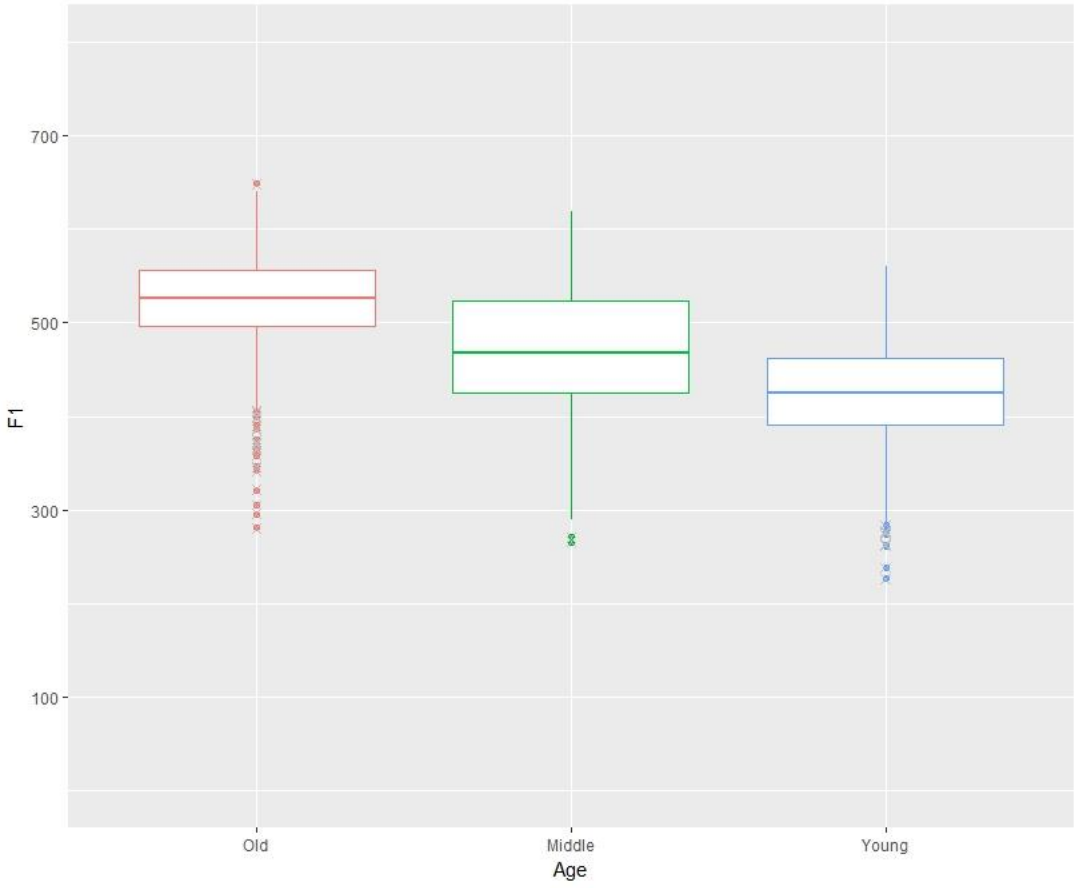


Figure 25: The spread of MOSUL's height by age.

Both gender and class were returned as insignificant in their effect on the height of the MOSUL vowel. In gender, it can be seen from Figure 26 below that males have a slightly lower inter-quartile with an average of 464 Hz. This indicates that their articulation of the vowel is higher in position compared to their female counterparts (average 474 Hz). This pattern, albeit statistically insignificant, is compatible with the overall gender pattern in which males appear to be favouring supralocal realisations.

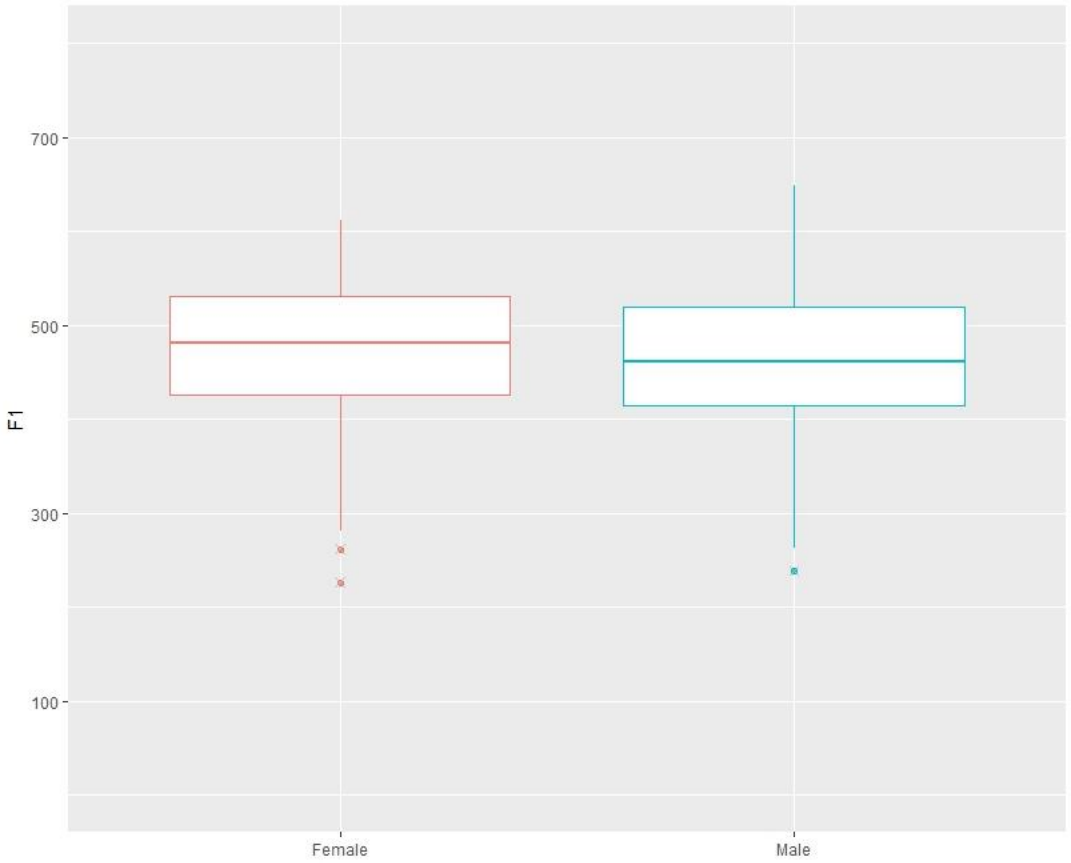


Figure 26: The spread of MOSUL's height by gender.

In class, it can be seen from Figure 27 below that MC speakers had a slightly lower boxplot and an average of 462 Hz compared to LMC speakers (average 474 Hz). This indicates that the former group's articulation of this vowel is higher than the latter's. Although this was not significant, it is still in line with the class trend observed so far in which MC speakers tend to produce supralocal realisations of the variables.

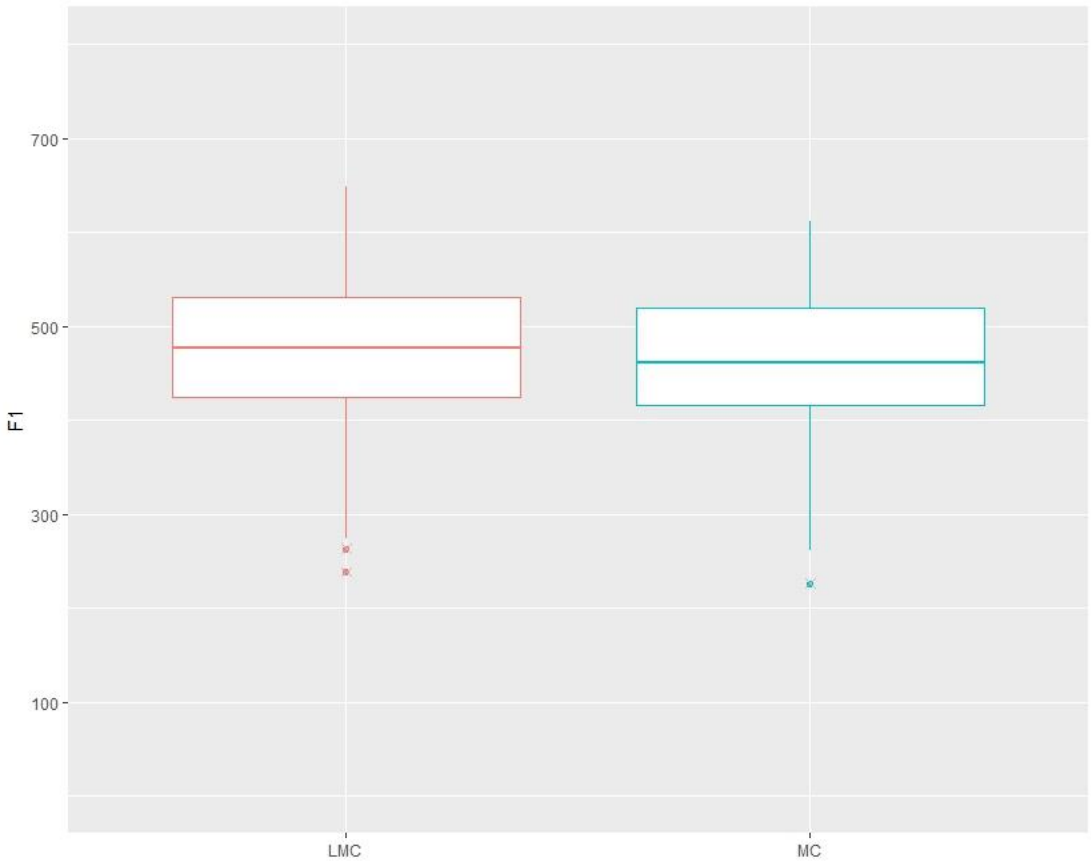


Figure 27: The spread of MOSUL's height by class.

To see how the height of this vowel patterned by gender and class for each age cohort, Figure 28 below displays the spread of F1 across all these groups. It can be seen that the first four boxplots from the right, which represent the gender and class groups of the young cohort, have relatively lower boxplots. This means they produced the MOSUL vowel in an overall high position compared to the other groups. The male MC speakers of this cohort have a relatively narrow spread of scores as well as a narrow interquartile range compared to the rather diffuse counterparts of the other three groups who were more variable in their scores of this formant. The middle-aged speakers of all gender and class categories have relatively higher boxplots, which indicate that they produced the traditional low version of MOSUL. Also noteworthy here are the gender and class groups of the old cohort who apparently had the highest F1 boxplots and medians. This also indicates that they produced the traditional height of MOSUL.

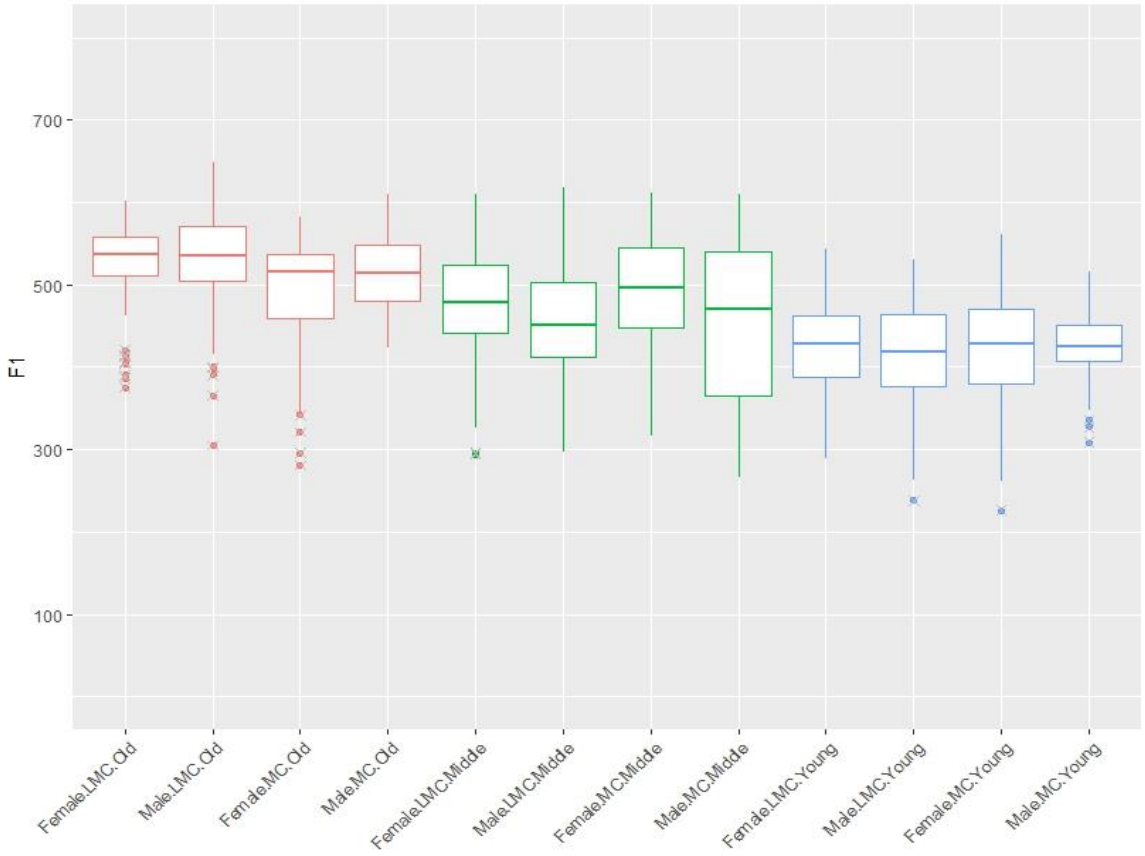


Figure 28: The spread of MOSUL's height by age, gender and class.

9.4.6.2 Second formant

Factor		Coef	Tokens	Mean
Age	Middle	55.505	699	1261.250
	Old	2.842	621	1215.545
	Young	-58.347	675	1158.806
Part of speech	Verb	31.362	1395	1221.522
	Adjective	2.930	38	1205.690
	Noun	-34.292	462	1186.697
Following Sound	Uvular	34.850	154	1234.797
	Pharyngeal	5.956	164	1243.967
	Emphatic	2.856	114	1195.856
	Non-Guttural	-43.662	1563	1208.039
Speaker mean	1212.362			
Intercept	1210.717			
Df	5			
Tokens Total	1995			
Non-significant factors (dropped from best model)				
Gender	Female	[N.S.]	964	1246.307
	Male	[N.S.]	1031	1245.821
Class	LMC	[N.S.]	1157	1233.922
	MC	[N.S.]	838	1262.808
Preceding Sound	Affricate	[N.S.]	76	1189.682
	Approximant	[N.S.]	411	1225.968
	Emphatic	[N.S.]	142	1226.277
	Fricative	[N.S.]	251	1275.925
	Nasal	[N.S.]	276	1217.916
	Pharyngeal	[N.S.]	141	1232.607
	Stop	[N.S.]	427	1262.784
	Uvular	[N.S.]	271	1284.331

Table 17: Results of Rbrul model for MOSUL's advancement.

The degree of the backness and frontness of this vowel also appears to be conditioned by age. Table 17 above shows the results of the second formant. It can be seen that MOSUL is not stable over time in this dimension with a statistically significant difference between the young group on the one hand and the middle-aged and old groups on the other. The young speakers appear to use a backer quality of the vowel with a negative coefficient compared to positive coefficients for the middle-aged and old groups. Figure 29 below shows a boxplot of the means of F2 produced by the three cohorts in which we can see the difference between the age cohorts in that the overall F2 value descends from the old and middle-aged cohorts to the young one. As can be seen from the figure that the middle-aged speakers' production was fronter than the old group (around 46 Hz difference). However, this difference was not significant and the marked change was rather between these two latter groups and the young group with the latter group appears to be adopting a backer version of the vowel. This signals a change in this dimension of the MOSUL vowel.

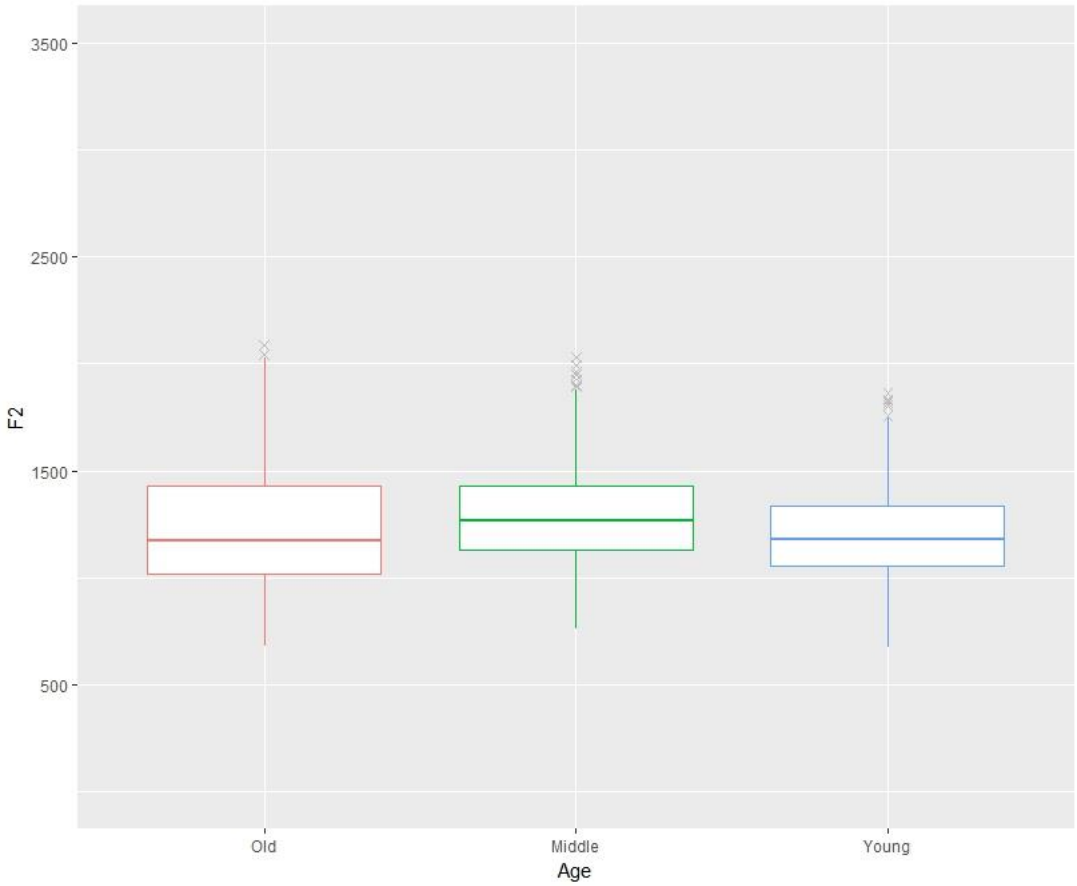


Figure 29: The spread of MOSUL's advancement by age.

If we take the F1 and F2 patterns together, we can see that the young speakers appear to be favouring a higher and backer realisation of the vowel, more of a *gelet*-like quality. To illustrate this overall change in a vowel plot, Figure 30 below shows both F1 and F2

measurements to illustrate how the articulations can be mapped on the vocalic space. It can be seen that young speakers seem to have a trend of realisation clustering towards a higher and backer position of the plot. On the other hand, it can be seen from the plot the productions of middle-aged groups cluster around a lower position than the young group. The difference is more marked between the young and old groups with the productions of the latter group are further down in the plot.

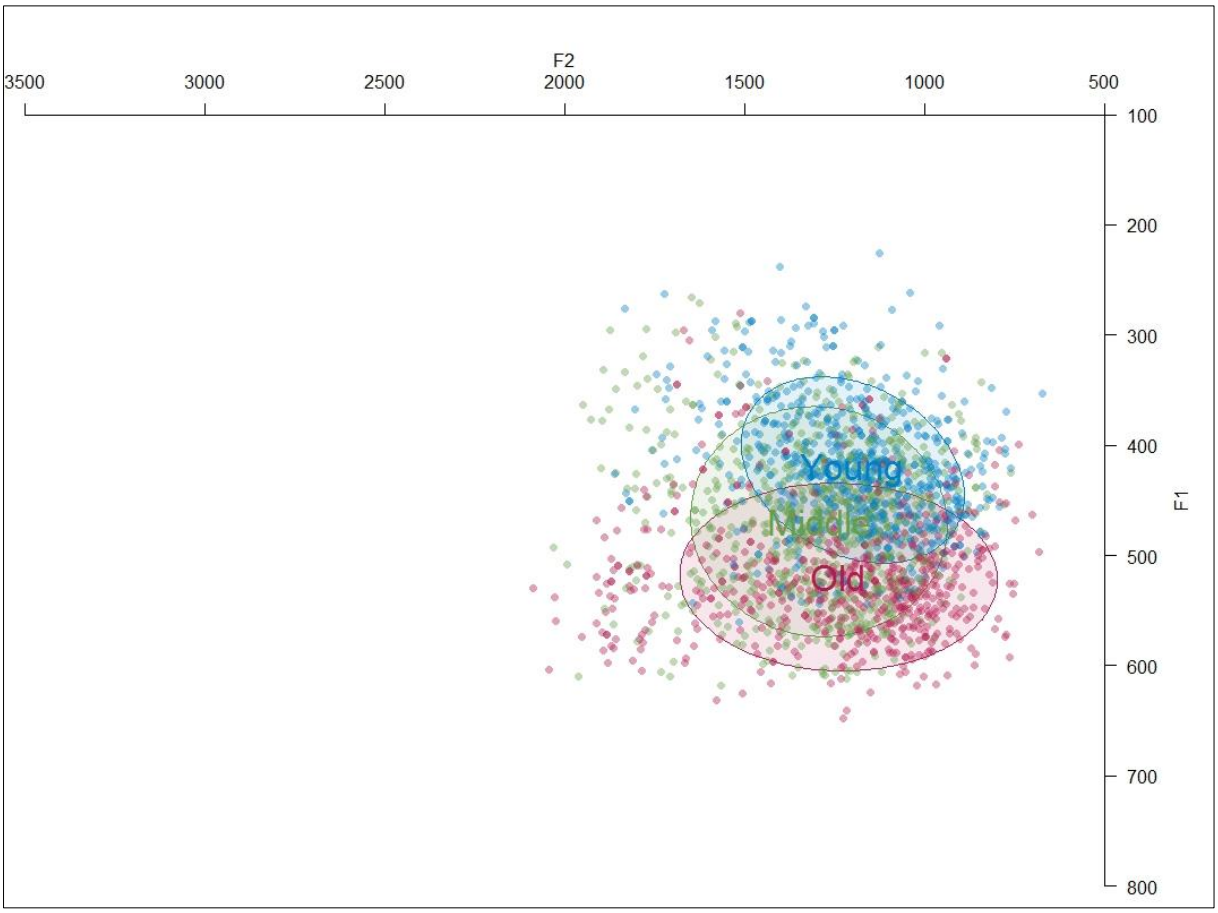


Figure 30: A vowel plot of the MOSUL vowel by age cohorts.

Gender was not found significant for the frontness/backness dimension of the MOSUL vowel as both females and males, as shown in Figure 31 below, had roughly similar boxplots and medians and an average of 1246 Hz for each.

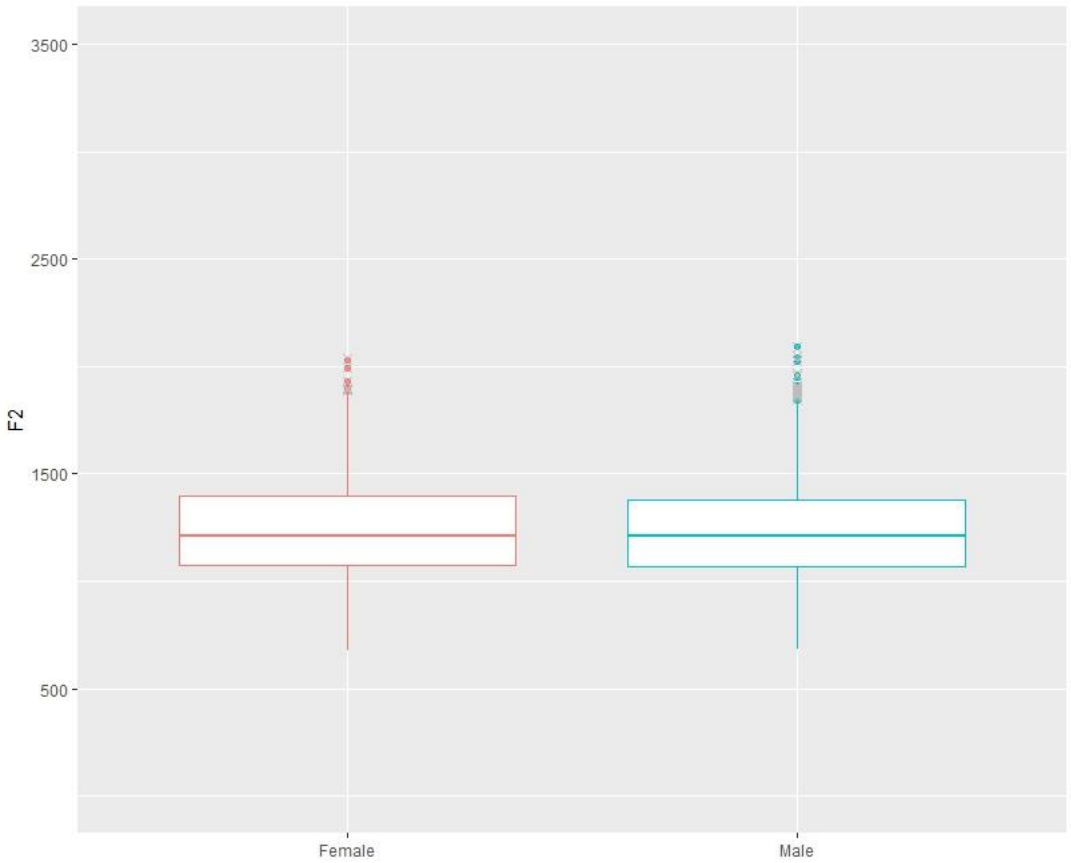


Figure 31: The spread of MOSUL's advancement by gender.

In terms of class, Figure 32 below shows that LMC speakers had a relatively condensed inter-quartile range, which indicates a focused production of the advancement of this vowel. Their average (1234 Hz) was lower than that of the MC group who in turn had a rather diffuse inter-quartile box and an average of 1263 Hz. These indicate an overall fronter realisation of this vowel. However, class was not found significant in the backness and frontness of the MOSUL vowel.

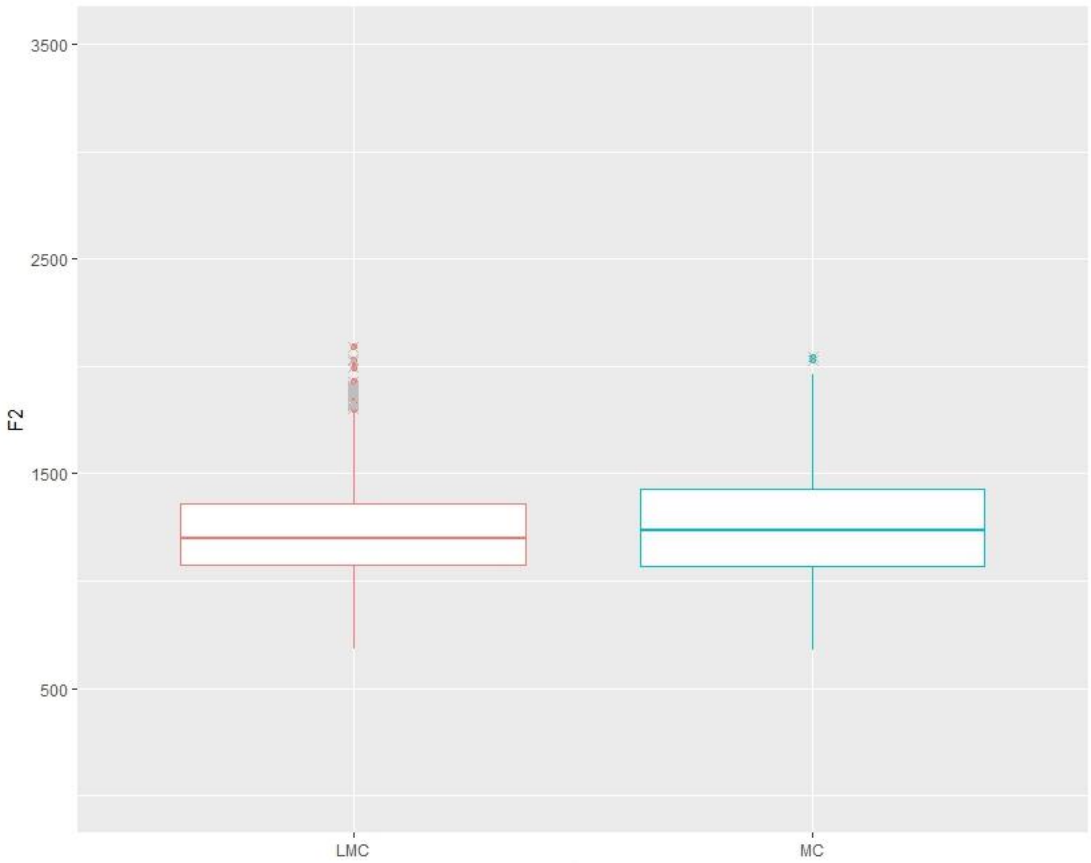


Figure 32: The spread of MOSUL's advancement by class.

To compare how speakers of all social groups patterned in terms of MOSUL's advancement, Figure 33 below displays the spread of F2 across the three social factors. We can see that male MC speakers of the middle-aged cohort stand among the rest with a higher boxplot. Male and female MC speakers of the old cohort also have comparatively higher boxplots, which indicate fronter realisations of this vowel. This is in contrast to the young cohort, of both gender and class subgroups whose articulation of MOSUL appears to be backer. This signals a change towards a non-traditional *gelet*-like quality of this vowel. On the whole, the view from these findings is that MOSUL is getting backer over time as shown in the speech of younger generation of both gender and class backgrounds.

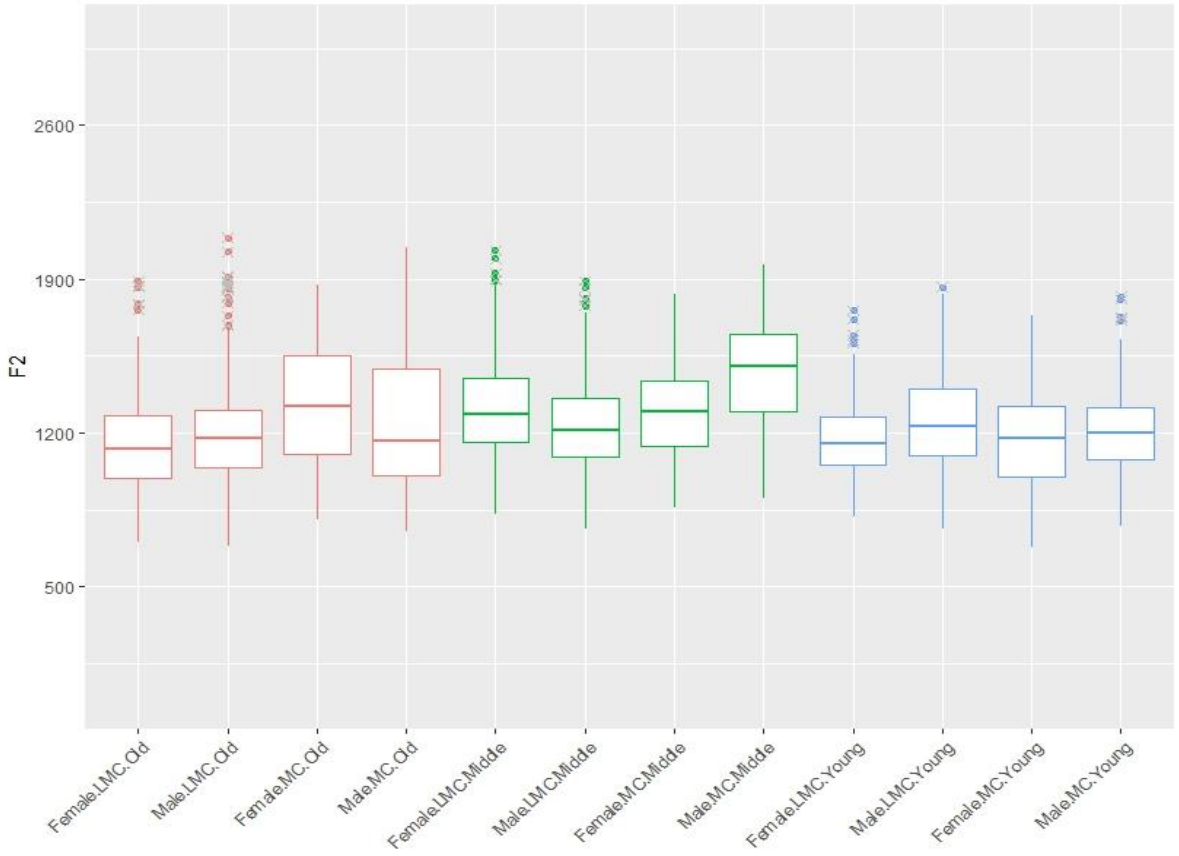


Figure 33: The spread of MOSUL's advancement by age, gender and class.

A glance at the table shows that there is an effect for two linguistic factors: part of speech and the following sound. In the part of speech, it was found that the MOSUL vowel tends to be fronter in verbs and adjectives with positive coefficients for these two categories compared to nouns. Figure 34 below shows a boxplot of the F2 of the vowel across the three parts of speech. It can be seen from the figure that the nouns boxplot is comparatively lower than the other categories, which indicates a lower F2 overall value and hence a backer realisation of the vowel in this category. This was significant with a negative coefficient of -34.292 and a lower mean value (at 1186.697) than both verbs and adjectives at 1222 and 1206 respectively.

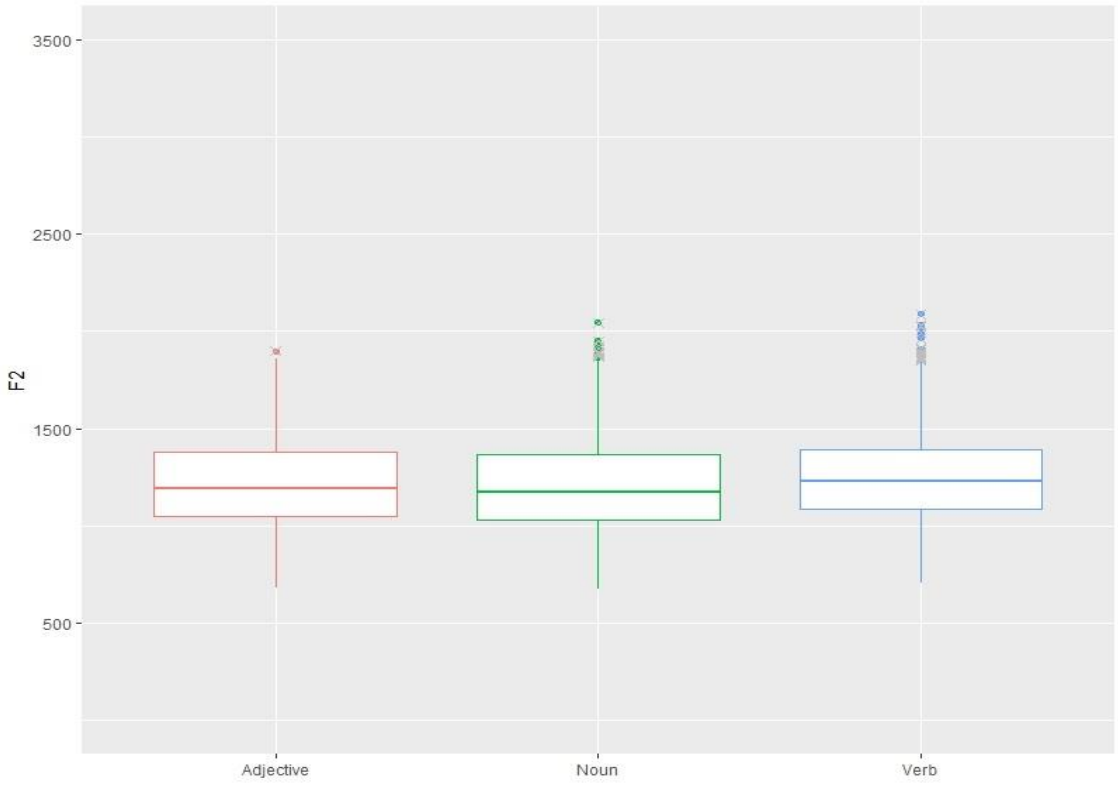


Figure 34: The spread of MOSUL's advancement by part of speech.

In the following sound factor, it was found that this vowel tends to be backer when followed by non-guttural sounds than when followed by gutturals (Figure 35 below). The three guttural consonant types were returned with positive coefficients, which correspond to a higher F2 value and correspondingly a fronter realisation of the vowel in the oral cavity. This means the MOSUL vowel was overall produced fronter when followed by guttural sounds than when followed by non-guttural sounds.

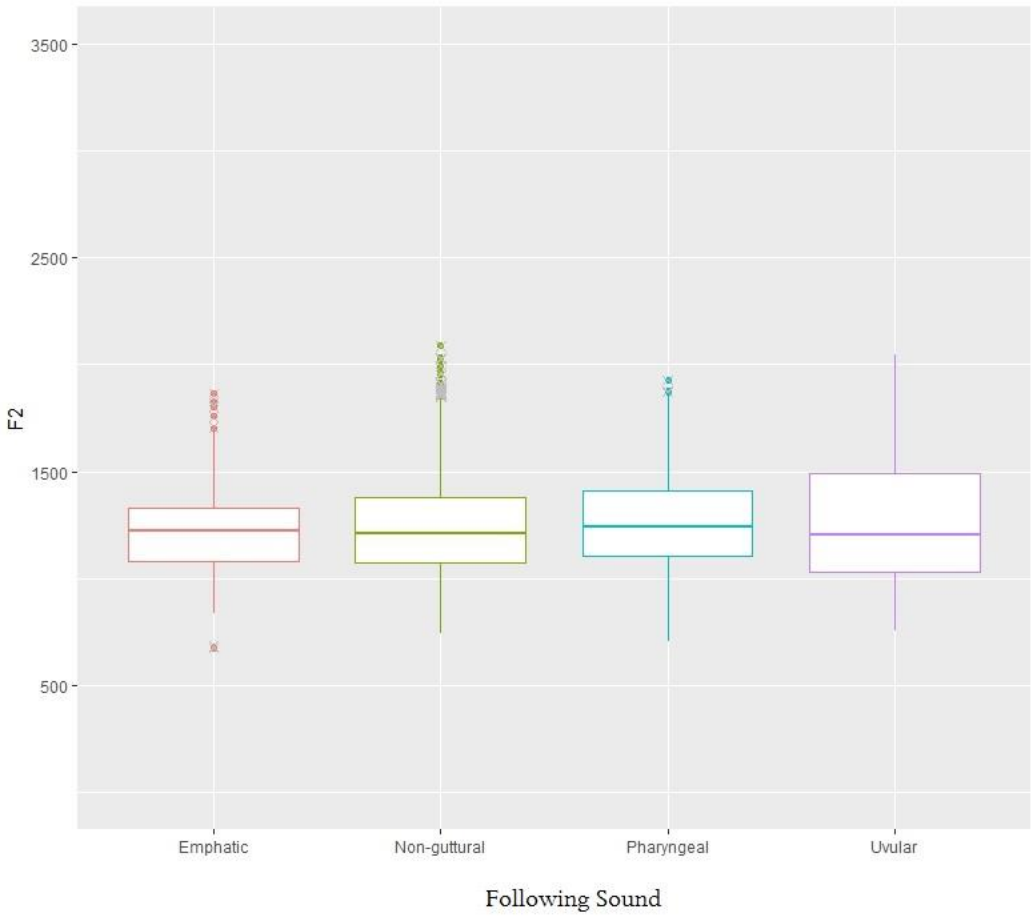


Figure 35: The spread of MOSUL's advancement by following sound.

From the above, we can discern that the height and advancement of the MOSUL vowel are conditioned by both social and linguistic factors, with some of the factors showing an interaction between them. The next section will discuss and explain the results presented above.

9.5 Discussion and concluding remarks

The results presented above have revealed that this vowel shows different aspects of variability in Maṣlāwi Arabic. This chapter has sought to assess some statements in the previous literature while accounting for the variability and change patterns using the data analysed for this study. This was further motivated by the fact that there are linguistic and sociolinguistic aspects of this vowel in MA that have not been investigated in the literature before.

As we have seen in the presentation of the results above, the contiguity of guttural sounds (pharyngeals, emphatics and uvulars) appears to be not the only predictor of a lowered version of /uː/ (i.e. [oː]). It was found that this realisation can occur preceding and following different sounds. This finding differs from what has been suggested in previous accounts (e.g. Blanc,

1964, p. 41; Jastrow, 1994, p. 120; Oussani, 1901, p. 101) on this variable that a lowered realisation is possible only next to guttural sounds. While those studies did not provide further information on why we should expect this realisation in this context rather than in others, it is fair to say the orientation and scope of interest differ from one study to another and from one era to another. The analysis of the current study could not support the previous statements in that regard.

The study has also revealed that this realisation can occur in different verb conjugations alongside, e.g. [asuːq] 'I convey' and [abuːq] 'I steal' in which a lowered production was reported as not possible. The current study has also shown that the lowered [oː] realisation of MOSUL vowel can occur in not only verbs but also other types of words. The occurrence of this realisation across the different factors helps reinterpret previous statements that do not seem to be an accurate reflection of the behaviour of this vowel. These findings presented above inform the phonology of MA in that there seems to be a relaxation of the constraints previously assumed to be governing the occurrence of [oː] in MA.

The analysis has also shown that this vowel was produced fronter when followed by guttural sounds (pharyngeals and uvulars and emphatics) than when followed by non-guttural sounds. It has often been reported that a change in the formant values of vowels occurs in the contiguity of guttural sounds. However, a rise in F2 value is often not expected given the retraction in the tongue's root and dorsum in producing these sounds, which often affects the neighbouring vowels (Shahin, 2002). However, the effect of these sounds on the neighbouring vowels depends on the type of vowels as well as the dialect being investigated. When /uː/ is produced next to a guttural sound such as a pharyngeal, the tongue position is lowered and fronted and this acoustically would manifest as higher F1 and F2 values. The vowel resulting from this is lowered and centralised (Vaissière, 2011, p. 10). The finding of this study is not surprising and is in line with a number of studies. In his study on the effect of pharyngeal sounds on the formants of neighbouring vowels in Iraqi Arabic, Al-Ani (1976a) analysed pharyngeal /ʕ/ and found that this sound raises the second formant of /u/ vowel while it lowers it for /a/. Similar findings have also been reported by Butcher and Ahmad (1987) on Iraqi Arabic and by Alwan (1986) on Iraqi and other Arabic dialects.

The study has also shown that the fronting of the MOSUL vowel is more visible in verbs and adjectives than nouns. While we lack previous studies with which to compare this finding, the only possible explanation for this fact might have to do with this being an artefact of the dataset of this study and thus a generalisation should be taken with caution. Further research is needed to discern the status of this pattern.

The analysis has also provided an overview of the social patterning of this vowel in which gender was shown to be playing a role in that males produced shorter durations of the vowel than females who in turn opted for longer durations of the vowel. Males were also found to be using higher versions of this vowel, which indicates an orientation toward a more supralocal quality of this vowel in terms of height. Albeit statistically insignificant, this finding tallies with the gender pattern observed so far (i.e. in the rhotic variable) in which males were found to be using supralocal realisations of that variable.

There is also variation in the class–related results of this variable. While LMC speakers were found to be using rather supralocal back realisations of MOSUL, the prominent class-related trend is that MC speakers appear to be using more supralocal qualities of this vowel. This was manifested in the latter group's articulation of shorter and higher versions of the MOSUL vowel compared to the LMC group. Albeit statistically insignificant, these findings appear to be analogous to the class pattern revealed in the rhotic variable in that MC speakers were also found to be favouring the supralocal realisations of that variable.

The duration behaviour of this vowel has shown an age-related pattern in which middle-aged and young groups produced shorter durations of this vowel than their old counterparts. We also have evidence in support of a change in progress in the height and advancement of this vowel evidenced by the statistically significant discrepancy in the values of F1 and F2 between the three cohorts. Maṣlāwi speakers, particularly the young, appear to be shifting towards a shorter, higher and backer version of the vowel. Therefore, what we have here is a case of a vocalic change in Maṣlāwi Arabic, as far as the data of this study can tell. In this change, MA's [oː] displays a convergence towards a supralocal nation-wide *gelet* quality. This age-related finding dovetails with the one reported for the rhotic variable in that younger generations appear to be favouring the supralocal realisation of this variable. This finding was not surprising in view of what I have pointed out earlier and will be discussed in greater detail in chapter 11 that, given several reasons, a shift towards *gelet* is expected to be in operation in the phonological system of MA. This takes the form of a levelling process in which the retreat of the traditional realisation of this vowel appears to be another case in point.

To sum up, this chapter has accounted for a traditional vowel in Maṣlāwi Arabic giving an overview of the realisation peculiarity of this vowel in Mosul and *qeltu*. It reviewed and assessed a number of observations in the literature on this vowel showing that the [oː] realisation is not necessarily subject to the limitations previously described to be existing in its production. The analysis has also shown aspects of the social patterning of this vowel, which revealed gender, class (albeit statistically insignificant) and age patterns. The analysis

also revealed another important aspect of the MOSUL vowel—age. In this factor, young Maṣlāwis appear to be shifting their production towards a *gelet*-like quality that is higher and backer as evidenced by the discrepancies in F1 and F2 values between them and the middle-aged and old groups. A similar change has also been found in the duration of this vowel. Thus, these results confirm a change in apparent time in the production of this vowel in MA. The next chapter will deal with the other vowel intended for analysis in this study, word-final (a), to see, among other things, if a similar change in quality can be observed in its production in modern-day MA.

Chapter Ten: Word-final (a)

10.1 Introduction

This chapter analyses the realisation of word-final (a) in the speech of Maṣlāwi Arabic speakers. It seeks to uncover aspects of variability and change in its production. To this end, an acoustic analysis of the duration and the first two formants of this vowel was conducted. The state of affairs of this variable in the literature leaves us with few, if any, comparison points to refer to as this vowel has never been investigated in MA. However, the lack of previous accounts could still be an advantage to the current study to uncover new insights on the behaviour of this vowel.

This chapter begins by reviewing the research on this variable, largely with reference to other *qeltu* dialects. It also reviews its occurrence in all possible morphological contexts as part of stems and suffixes. To get an impression of the vowel, the chapter will also review some remarks on its quality in Iraqi Arabic. The remainder of the chapter deals with the data analysis of this variable giving an account of the procedures taken in the analysis as well as the statistical treatment conducted. The chapter also provides a presentation and discussion of the results with some concluding remarks.

10.2 An overview of the variable

As will be reviewed below, the production of word-final (a) serves as a differentiating feature between Iraqi Arabic dialects. Despite this fact, little has been done in the literature to address aspects of phonological variation of this variable in IA. There are a number of scattered mentions of this variable in the context of general descriptions of Iraqi Arabic dialects. What we know about this vowel in *qeltu* dialects is largely gleaned from the distribution of *imāla* in this position. Blanc (1964, pp. 32-33) gives an account of this variable in the dialects spoken in Baghdad and shows that all three dialects in the city (i.e. MBA, CBA and JBA) have realisations that range from mid front to low front, low central and low back. There is also another account by Abu Haidar (1991a) in which she describes this vowel in CBA. We also have another work by Erwin (1963) in which he reviews the different realisations of this variable in MBA. These studies will be reviewed over the course of this chapter.

10.3 The contexts of occurrence of the variable

In order to observe the principle of accountability in this variable, it is instructive to establish the possible variants as well as the contexts in which it can occur. This is to facilitate coding the relevant tokens for further analysis.

The occurrence of word-final (a) is subject to Arabic morphological rules. Therefore, before presenting the distribution of this variable in IA, it is worth giving an overview of the morphological background of this variable in Arabic. Most reference will be to Iraqi Arabic being the relevant dialect involved in this study. Basically, word-final (a) can occur as part of a stem or a suffix. In what follows, I will present an overview of the occurrence of this variable in these two contexts with examples. This is to get an idea of the types of words expected for this variable. This is also to provide the foundations of a description of this variable for this study and future studies.

10.3.1 In stems

Words in Iraqi Arabic can come either as a single stem or a stem with one or more affixes (Erwin, 1963, p. 47). I can illustrate this variable in the single stem context in words such as [tara] 'or else' and [haːða] 'this (m.)'.

10.3.2 As a suffix

It can also come as a suffix, which in turn comes in two forms: *tāʾ marbūṭa* and personal pronoun. This section will describe these two contexts with examples.

10.3.2.1 Tāʾ marbūṭa

In Arabic, *tāʾ al-taʾnīṯ al-marbūṭa* is a suffix that is used to mark the feminine gender in Arabic (Hachimi, 2006, p. 156). Ferguson (2015, p. 469) notes that in OA, it is (*-ah*) in pause form and (*-at*) in context form. However, Ferguson (ibid.) points out that in most Arabic dialects, only the vowel is pronounced while [h][157] is dropped. The types of adjectives and nouns that this suffix forms vary. These can be summarised as follows:

a) This suffix is used to form feminine nouns out of masculine nouns (Erwin, 1963, p. 168), as can be illustrated in the following examples[158]:

Gelet	**MA**	**Gloss**	*vs.*	***Gelet***	**MA**	**Gloss**
[tˤabiːb]	[tˤabiːb]	'doctor (m.)'		[tˤabiːba]	[tˤabiːbaˑ]	'doctor (f.)'
[zamiːl]	[zamiːl]	'colleague (m.)'		[zamiːla]	[zamiːlaˑ]	'colleague (f.)'

b) It is also used to form an individual unit of collective nouns (Abu Haidar, 2006a, p. 227). Erwin (1963, pp. 166-167) provides a number of examples in *gelet*. Some of them can be compared as follows:

[157] Ferguson notates it as *h*.
[158] I provide the MA examples in this section for comparison.

Gelet	**MA**	**Gloss**	*vs.*	***Gelet***	**MA**	**Gloss**
[səmatʃ]	[samak]	‘fish’		[səmtʃa]	[samaki]	‘a fish’
[gamulʸ]	[qaməl]	‘lice’		[gamlʸa]	[qamli]	‘a louse’

c) It can also be used to derive instance nouns (denoting a single act of an action) from verbal nouns (Erwin, 1963, p. 164), as can be compared in the following examples:

Gelet	**MA**	**Gloss**	*vs.*	***Gelet***	**MA**	**Gloss**
[garisˤ][159]	[qaʁəsˤ]	‘pinching’		[garsˤa]	[qaʁsˤaˑ][160]	‘a pinch’
[dafur]	[dafəʁ]	‘kicking’		[dafra]	[dafʁaˑ]	‘a kick’

d) It is also used to form the feminine *nisba* ‘attribution’ ending—a derivational affix that consists of /ijj/[161] plus /a/. This is to form a type of adjectives called *nisba* adjectives (Erwin, 1969, p. 355). Abu Haidar (2006a, p. 227) provides some examples in *gelet* that can be compared to MA as follows:

Gelet	**MA**	**Gloss**	*vs.*	***Gelet***	**MA**	**Gloss**
[ʃurtˤi]	[ʃəʁtˤi]	‘policeman’		[ʃurtˤəjja]	[ʃəʁtˤəjjaˑ]	‘policewoman’
[almˤaːni][162]	[almaːni]	‘German (m.)’		[almˤaːnəjja]	[almaːnəjjaˑ]	‘German (f.)’

Erwin (1963, pp. 172-173) lists a number of other *nisba* nouns and adjectives with meanings that denote concrete objects, abstract concepts and places. Some examples can be compared as follows:

Gelet	**MA**	**Gloss**	*vs.*	***Gelet***	**MA**	**Gloss**
[qunsˤul]	[qənsˤəl]	‘consul’		[qunsˤulijja]	[qənsˤələjjaˑ]	‘consulate’
[sˤajdali]	[sˤajdali]	‘pharmacist’		[sˤajdalijja]	[sˤajdaləjjaˑ]	‘pharmacy’
[barqi]	[barqi]	‘telegraphic’		[barqijja]	[barqəjjaˑ]	‘telegram’

e) It can also be affixed to certain words to form nouns that refer to devices, tools or nouns with specific meanings (Hoyt, 2006, p. 430). In Iraqi Arabic, this can be compared[163] as follows:

Gelet	**MA**	**Gloss**	*vs.*	***Gelet***	**MA**	**Gloss**
[ʃamis]	[ʃamis]	‘sun’		[ʃamsijja]	[ʃamsijji]	‘an umbrella’

[159] The realisation of the vowel in the second syllable as [i] in words like this is, in fact, peculiar to Baghdadi *gelet*. Another *gelet* variant is [garəsˤ].
[160] I also heard vocalised realisations of [ʁ] in this word in MA, e.g. [qaːsˤaˑ].
[161] In some studies, it is notated as /iyy/.
[162] Abu Haidar notates this example with a clear [l] while it is, in fact, a velarised one in *gelet*, e.g. [alʸmʸaːni].
[163] Hoyte notates the first example as follows: *šams* (*šamsiyy-a*). I provide the Iraqi Arabic equivalents here.

[maktab] [maktab] ‘office’ [maktaba] [maktabaˑ] ‘library’

10.3.2.2 Personal pronouns

Word-final (a) can also come as part of a suffix in personal pronouns, which are of two types: possessive pronouns, object pronouns. Possessive pronouns are enclitic pronouns that are added to stems to denote possession (Al-Khalesi, 2006, p. 24; Erwin, 1963, p. 272)[164]. I can illustrate these[165] in the word /kitaːb/ ‘book’ in Table 18.

Arabic form	Transliteration	Example	Gloss
ـه (his)	-a	/kitaːba/	‘his book’
ـها (hers)	-ha	/kitaːbha/	‘her book’
ـنا (our, dual and plural)	-na	/kitaːbna/	‘our book’

Table 18: List of possessive pronominal suffixes in Iraqi Arabic.

They can also be affixed to verbs and prepositions to function as the objects of these categories (Erwin, 1963, p. 272). It is worth noting that the dual and plural forms of this type are merged in Iraqi Arabic. I can illustrate this type in the word /qaːbal/ ‘he met’ (Table 19).

Arabic form	Transliteration	Example	Gloss
ـه (him)	-a	/qaːbalta/	‘I met him’
ها (her)	-ha	/qaːbalitha/	‘I met her’
نا (us, dual or plural)	-na	/qaːbalatna/	‘she met us’

Table 19: List of object pronominal suffixes in Iraqi Arabic.

10.4 An overview of the variable in Iraqi Arabic

Having discussed the contexts involving this variable, I review here the studies we have on its realisation in Iraqi Arabic. As indicated earlier, this variable is one of the differentiating features of Iraqi Arabic. We have a few mentions of this variable with examples from the main dialects spoken in Iraq. In *gelet* dialects, it is often produced with a mid front [ɛ] and this occurs even if the preceding sound is an emphatic as in [ħuntˤɛ][166] ‘wheat’ (Blanc, 1964,

[164] Erwin and Al-Khalesi refer to them as ‘pronoun suffixes’.
[165] Only the ones relevant to the discussion (i.e. those end with /a/). This applies to object pronouns too. A fuller discussion of all the pronouns can be found in (Al-Khalesi, 2006) and (Erwin, 1963).
[166] Blanc reports the same variant for CBA in this example.

p. 32). Erwin (1963, p. 20) refers to another quality[167] if it is preceded by /ħ/ or /ʕ/, as in [sˁaħħa] 'health' and [sabʕa] 'seven'. Blanc (1964, p. 32) notes that the quality of word-final (a) preceded by /h/ is conditioned by whether or not /h/ is preceded by /aː/. If it is preceded by /aː/, then word-final (a) is realised either [ɛ] or [a]. However, if /h/ is preceded by any other vowel, then only [ɛ] is realised, as in [waddaːha] or [waddaːhɛ] 'he sent it' *vs.* [waddoːhɛ] 'they sent it'[168]. Blanc (ibid.) also points out that the distribution of this variable in JBA is rather similar to that found in the other dialects of Baghdad, i.e. CBA and MBA. However, the difference is that JBA has low back [ʌ] especially near emphatics and /q/. It is also realised as [ɛ] or [ä] near front consonants while it is [a] or [ʌ] near back consonants, as in the following examples:

[waqqʌ] 'leaf'

[əħnä] 'we'

[saːʕa] 'hour'

The difference in the realisation of this variable is not only within *qeltu* dialects or vis-à-vis *gelet*, but a number of intra-*gelet* observations can also be made through my personal observations as a native to this dialect. In Baṣrāwi Arabic, for example, it is realised with a nasalised quality, particularly when preceded by pharyngeal, nasals and /r/ as in /basˁra/ → [basˁrã] 'the city of Baṣra'. In the city of Diyala, another *gelet*-speaking city to the north east of Baghdad, it is realised more like near-open low front unrounded vowel as in /manqala/ → [manqalæ] 'griller'.

While previous descriptions on its quality in Mosul are lacking, the author's personal observation shows that this variable is backer and relatively longer in duration in MA than in *gelet*. An important point worth mentioning here as regards the realisation of word-final (a) is its complementary distribution with *imāla* (described earlier in 4.3.1.3). Word-final (a) changes into [i] in the second type of *imāla*, also known as the 'strong' type. Blanc (1964, p. 45) states that it can be gleaned that in CBA, it is realised as [a] near emphatics and back consonants while it is realised as [i] if preceded by other consonants, as can be compared in the following examples[169]:

CBA	**MA**	***Gelet***	**Gloss**
[beːdˁa]	[beːðˁi]	[beːðˁa]	'egg'

[167] Erwin actually resembled it to the one in the word 'father' in English, albeit it is shorter in duration. Blanc (1964, p. 32) describes it as low central.
[168] The same applies to CBA.
[169] I provide the MA examples here for comparison

[bazzuːni] [bazzuːni] [bazzuːna] ‘cat’

Blanc (ibid.) notes that the situation in JBA works differently in that it does not depend on the preceding consonant, but rather on the sound that comes before it. Therefore, it is realised as [i] if the sound before the preceding consonant is one of Old Arabic *ī, i,* or *y*. Otherwise, it is realised as [a]. Compare:

OA	**JBA**	**Gloss**
bayḍa	[beːðˁi]	‘egg’
kalba	[kalba]	‘a female dog’

In terms of duration, the only accounts of this vowel come from a small number of works on *qeltu*. Abu Haidar (1991a, p. 31) mentions a long realisation of this variable in CBA that can occur in nominal forms corresponding to the SA feminine ending (*-ā’*), particularly in adjectives pertaining to colour and physical defects. In these adjectives, the final *hamza* (i.e. glottal stop [ʔ]) is dropped while the preceding long vowel is retained. It should be noted here that this also obtains in MA. In *gelet*, the glottal stop is elided while the length of the vowel is shortened. Compare the following examples[170]:

SA	***Gelet***	**CBA/MA**	**Gloss**
samrā’	[samra]	[samʁaː]	‘dark (f. sg.)’
ʿamyā’	[ʕamja]	[ʕamjaː]	‘blind (f. sg.)’

10.5 Data and analysis

Like the MOSUL vowel and in line with the procedures of the acoustic analysis described in the methodology chapter, the tokens (2620 in total) coded were segmented and annotated using a Praat script that measured the duration as well as the first two formants (F1, F2). The measurements obtained from each token were then entered into an Excel spreadsheet for coding in preparation for a statistical analysis.

The inclusion of this variable in the analysis is well motivated by an almost complete lack of literature on its occurrence in MA. Also, impressionistic commentaries and personal observations I gathered on the dialect suggest that a change involving this variable is expected. Contexts related to *imāla* were not considered as they are not within the remit of this study. Also not included were the tokens related to adjectives of colour and defects described above as they are realised invariably long. Only a couple of them were encountered

[170] Abu Haidar provides the examples for CBA, which are similar to how I hear them in MA. I provide the *gelet* forms here for comparison.

in the data, however. All the tokens were extracted and coded for the linguistic and non-linguistic factors. All the factors listed for the MOSUL vowel were also coded for this vowel (i.e. part of speech and phonological context (preceding and following). An additional factor considered was the morphological status of the instance of word-final (a) (being part of a stem or a suffix). Therefore, each instance of word-final (a) was coded as either 'suffixal' or 'stem' accordingly. Table 20 below shows a breakdown of the factors coded with the respective levels for each.

As sketched earlier in section 2.2.3, stress in Iraqi Arabic is attracted to heavy syllables, i.e. particularly the ones containing long vowel nearest the end of the word. When the word has no long vowels, stress is placed on the penultimate syllable in two-syllable words and on the antepenultimate syllable in all other words (Erwin, 1969, p. 28). This variable, being in an absolute word-final position, is thus categorically unstressed. As stress does not vary, it was not included as a factor in the model.

Linguistic factors	**Levels**
Preceding sound	Uvular, Emphatic , Pharyngeal, Non-guttural sound.
Following sound	Uvular, Emphatic , Pharyngeal, Non-guttural sound, Pause.
Part of speech	Adjective, Noun, Pronoun
Morphology of the token	Stem, Suffixal
Social Factors	**Levels**
Age	Old, Middle, Young
Class	Lower Middle Class, Middle Class
Gender	Female, Male

Table 20: A breakdown of independent (*fixed*) *predictors for word-final (a).*

Statistical Modelling

Having given a background of the variable and the acoustic analysis conducted for it, the data were treated statistically whereby a mixed-effect step-wise regression analysis was performed in Rbrul. The model was run three times, one for each of the three responses measured: duration, F1 and F2. For each run, the three non-linguistic factors (age, gender and class) and the three linguistic constraints (preceding sound, following sound and part of speech) were included. Another factor included for this variable is the morphological status of the token that carries the variable being a suffix or a stem, as detailed earlier in this

chapter. Speaker and token were set as random effects. I checked for two-way interactions between the social factors. The fixed-effect and random-effect predictors are shown in Table 21 below.

Fixed Predictors	Interactions	Random Predictors
Preceding sound	Age*Gender	Speaker
Following sound	Age*Class	Token
Part of speech	Gender*Class	
Morphology of the Token		
Age		
Social Class		
Gender		

Table 21: A breakdown of fixed and random factors for word-final (a).

10.6 Results

This section presents the results obtained from the statistical treatments using Rbrul. The coefficients given for each factor in the regression model help determine the direction of each factor as regards the realisation of the variable. Each factor level returned with a positive coefficient means the response (i.e. duration, F1 and F2) is favoured in that factor while the reverse is true of factors returned with negative values.

10.6.1 Duration

The first run concerns the duration of the vowel. This run included all the linguistic and social factors coded for this variable. Table 22 below shows the results of the Rbrul model for the duration of word-final (a).

Factor		Coef	Tokens	Mean
Age	Old	55.649	931	151.501
	Middle	-24.044	894	69.891
	Young	-31.604	765	63.401
Category	Pronoun	3.083	913	102.319
	Adjective	-0.933	481	91.503
	Noun	-2.151	1196	95.821
Speaker mean	97.31			
Intercept	94.741			
Df	7			
Tokens Total	2590			
Non-significant factors (dropped from best model)				
Gender	Female	[N.S.]	1254	101.245
	Male	[N.S.]	1336	93.616
Class	LMC	[N.S.]	1290	101.034
	MC	[N.S.]	1300	93.614
Morphology	Stem	[N.S.]	765	97.059
	Suffixal	[N.S.]	1825	97.415
Preceding Sound	Emphatic	[N.S.]	125	91.848
	Non-guttural	[N.S.]	2275	97.813
	Pharyngeal	[N.S.]	81	96.346
	Uvular	[N.S.]	109	93.78
Following Sound	Pausal	[N.S.]	496	101.728
	Emphatic	[N.S.]	501	95.066
	Pharyngeal	[N.S.]	673	100.67
	Uvular	[N.S.]	171	99.561
	Non-guttural	[N.S.]	749	92.351

Table 22: Results of Rbrul model for the duration of word-final (a).

It can be seen from the table that there is an age-related pattern in which there is a clear difference between young and middle-aged speakers on the one hand and old speakers on the other. The young and middle-aged speakers produced relatively shorter versions of the vowel compared to their old counterparts with negative coefficients of -24.044 and -31.604 for these two groups respectively compared to the positive coefficient for the old group. This demonstrates a change in apparent time involving the length of this vowel. Figure 36 below displays the spread of the duration scores by the three age cohorts. The clear pattern observable is that the individual plots for the middle and young groups are lower than that of the old group, which indicate a decrease over time in the duration of this vowel across

generations.

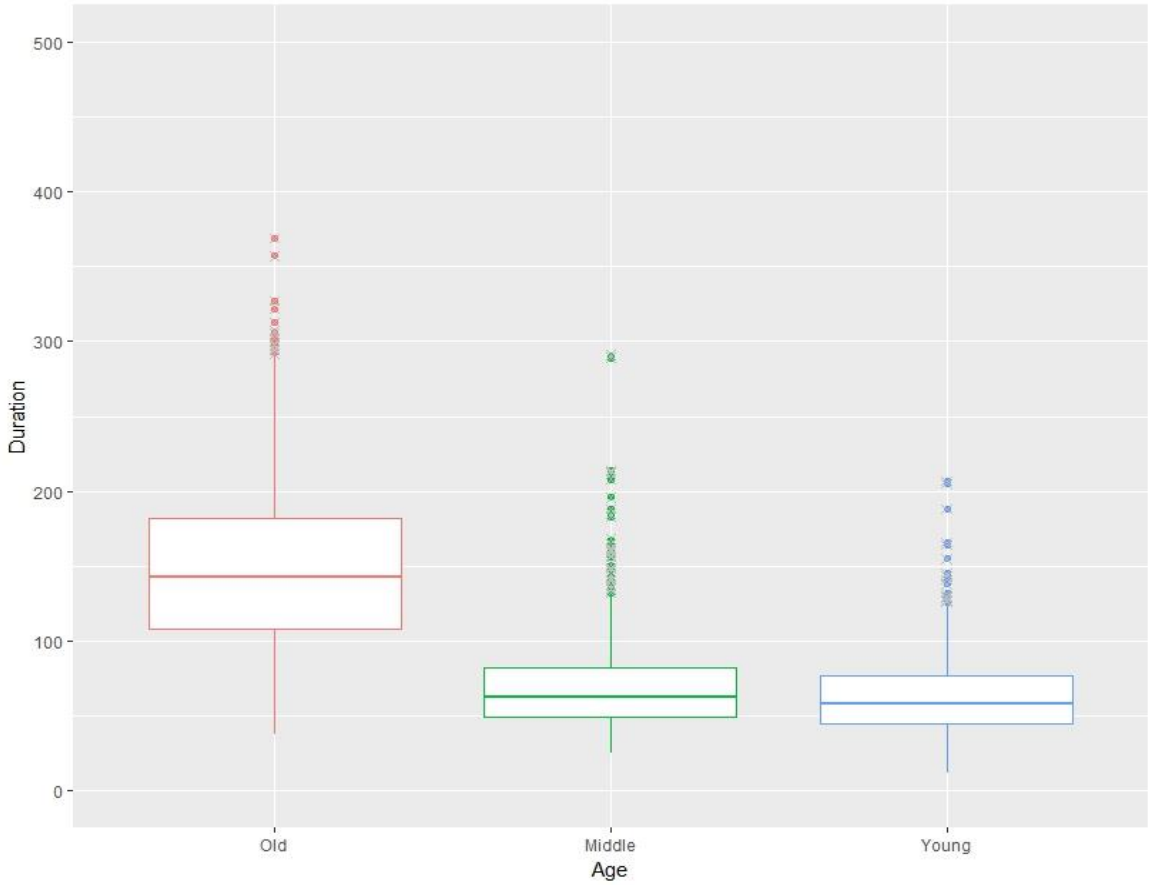


Figure 36 The spread of duration of word-final (a) by age.

No effect was found for gender and class on the duration of word-final (a). Figure 37 below shows the duration of this vowel by gender in which it can be seen that males had a relatively lower boxplot (average of 93.616 ms) compared to that of females (average of 101.245 ms). This indicates that the former group produced an overall shorter version of this vowel compared to the latter. This finding, albeit insignificant, is in line with the overall gender trend observed in this study in which males tend to produce supralocal forms of the variables in MA.

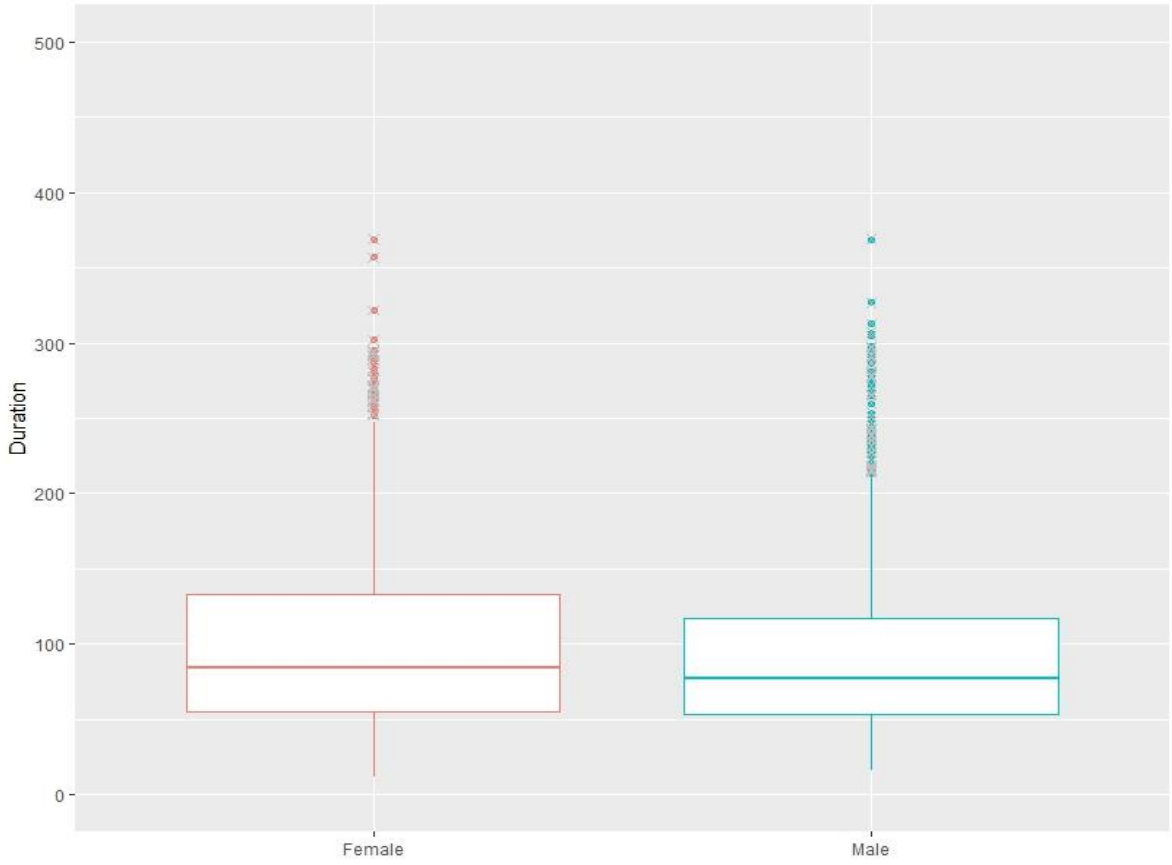


Figure 37: The spread of duration of word-final (a) by gender.

In terms of class, MC speakers' renditions of this vowel were slightly shorter in duration compared to those of LMC speakers. As can be seen from Figure 38 below, the durations produced by MC speakers are manifested in a lower boxplot (average of 94.614 ms) compared to that of LMC speakers (average of 101.034 ms). Although this finding was not found significant, it dovetails with the overall class pattern observed in which MC speakers appear to be behaving differently from their LMC counterparts. The former tend to adopt supralocal realisations while the latter tend to preserve the local ones.

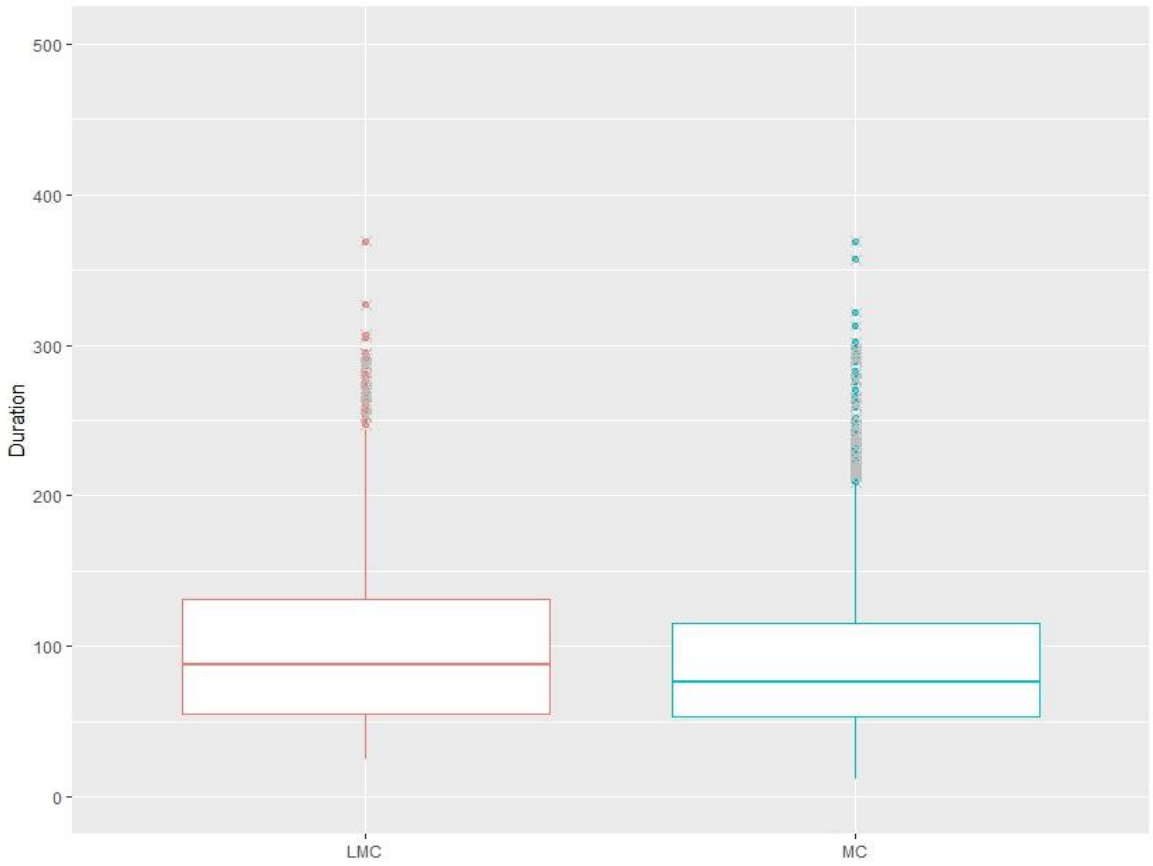


Figure 38: The spread of duration of word-final (a) by class.

Figure 39 below displays the spread of the duration of this vowel across the three social factors combined. The most prominent pattern visible in this figure is that both gender and class subgroups of the old cohort have relatively higher boxplots compared to the rest of the groups. This indicates that their articulations of this vowel are longer in duration compared to the rest of the groups who overall have shorter versions of this vowel with slight differences in their range of variation. This is in agreement with the overall age trend observed for the duration of this vowel and other dimensions assessed in other variables in which younger generations tend to shift away from local realisations.

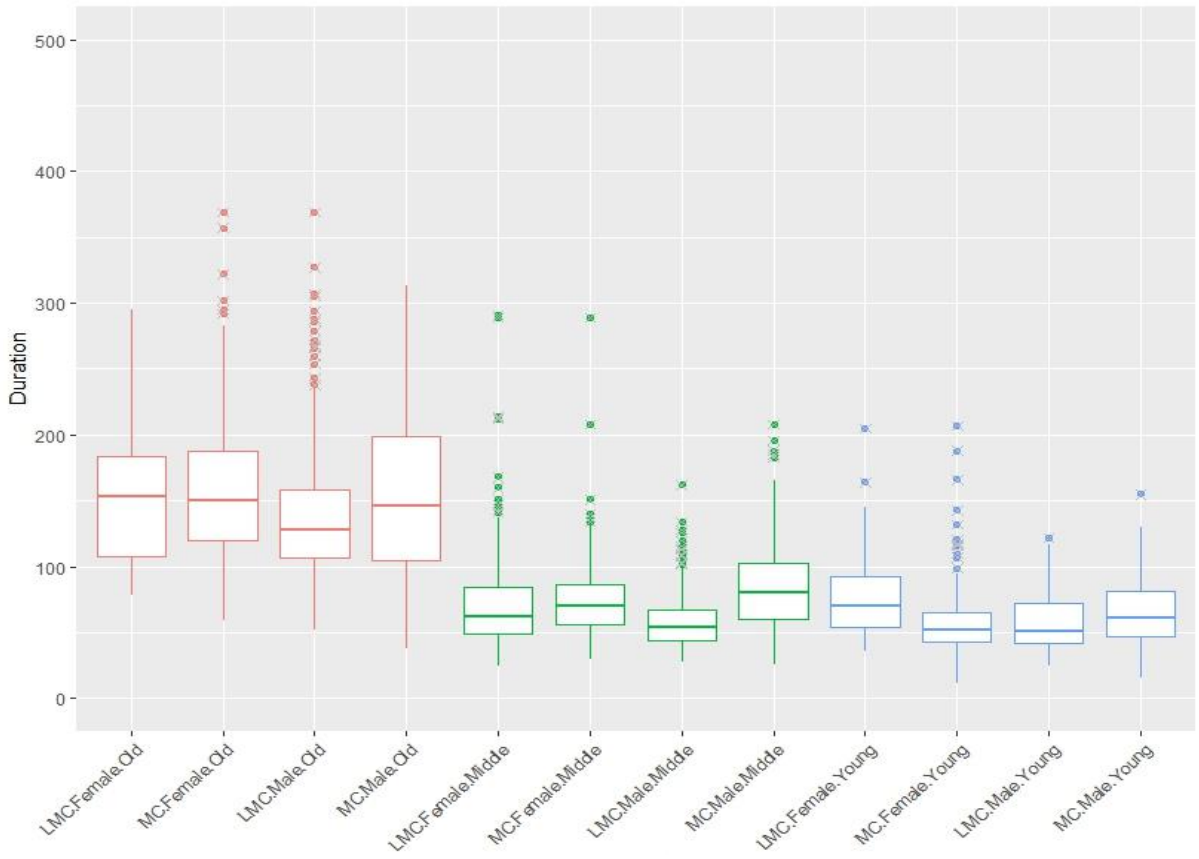


Figure 39: The spread of duration of word-final (a) by age, gender and class.

Word-final (a) was also found to be longer in pronouns than in nouns and adjectives. This can be illustrated in Figure 40 below in which we can see a gradation in the height of boxplot and inter-quartile box for the three categories from Adjective (smallest) to Noun (in the middle) to Pronoun (biggest). The difference between pronouns and other categories was significant in statistical terms with a positive coefficient of 3.083 and mean value of 102.319 ms. Before discussing the duration-related patterns, which I will deal with in the discussion part of this chapter, let us turn now to the formants of this vowel.

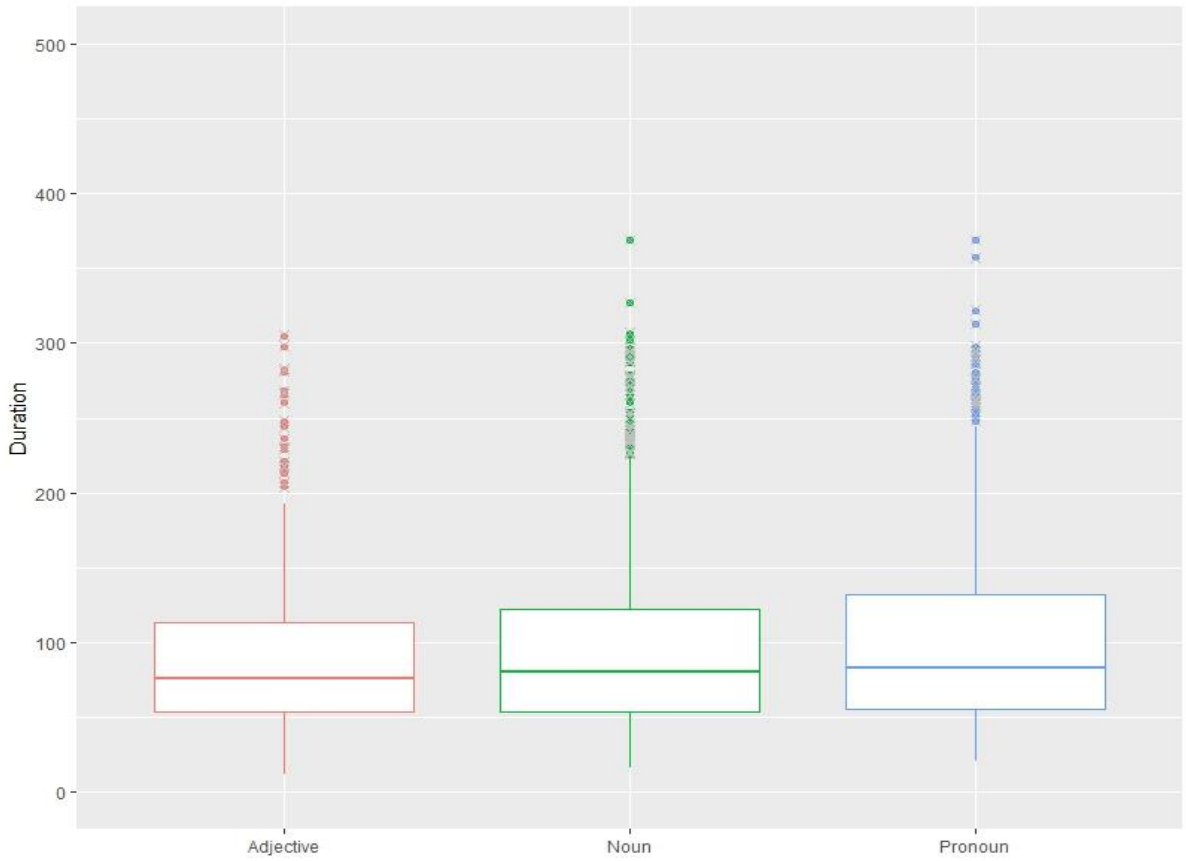


Figure 40: The spread of duration of word-final (a) by part of speech.

10.6.2 Formants

This section is concerned with presenting the statistical treatment of the first two formants of the vowel. Two Rbrul runs were performed, one for each formant: F1 (vowel height) and F2 (vowel advancement).

10.6.2.1 First formant

Table 23 below displays the results for the first formant. We can see that this response (i.e. the vowel height) shows age and gender patterns with an interaction between these two factors.

Factor		Coef	Tokens	Mean
Age	Old	47.171	931	652.391
	Young	-23.090	765	578.062
	Middle	-24.081	894	582.084
Gender	Female	15.664	1254	624.179
	Male	-15.664	1336	589.263
`Interactions	Age*Gender`	p<0.001		
Speaker mean	606.168			
Intercept	603.807			
Df	8			
Tokens Total	2590			

Non-significant factors (dropped from best model)

Class	LMC	[N.S.]	1290	607.903
	MC	[N.S.]	1300	604.447
Morphology	Stem	[N.S.]	765	609.202
	Suffixal	[N.S.]	1825	604.897
Part of Speech	Adjective	[N.S.]	481	603.012
	Noun	[N.S.]	1196	606.418
	Pronoun	[N.S.]	913	607.504
Preceding Sound	Emphatic	[N.S.]	125	597.249
	Non-guttural	[N.S.]	2275	606.661
	Pharyngeal	[N.S.]	81	613.485
	Uvular	[N.S.]	109	600.683
Following Sound	Pausal	[N.S.]	496	609.215
	Emphatic	[N.S.]	501	605.657
	Pharyngeal	[N.S.]	673	605.62
	Uvular	[N.S.]	171	619.036
	Non-guttural	[N.S.]	749	602.047

Table 23: Results of Rbrul model for vowel height of word-final (a).

The table shows us that the vowel was produced lower by old speakers compared to young and middle-aged speakers who overall produced higher versions of the vowel. This was statistically significant with negative coefficients for the latter two groups (at -23.090 and -24.081 respectively) compared to the positive coefficient (47.171; mean value of 652.391) of the old group. Figure 41 below displays the spread of F1 values for this vowel by age. We can see that the individual plots and medians of the middle and young groups are lower than those of the old group. This suggests that the height of this vowel is showing a change in apparent time in that the younger generations have a tendency toward a higher articulation of this vowel. We can see also that middle-aged speakers produced slightly higher versions of the vowel than their old peers. The middle-aged speakers' participation in this change is

interesting as this means the change in the height of this vowel has been around for a while in the dialect.

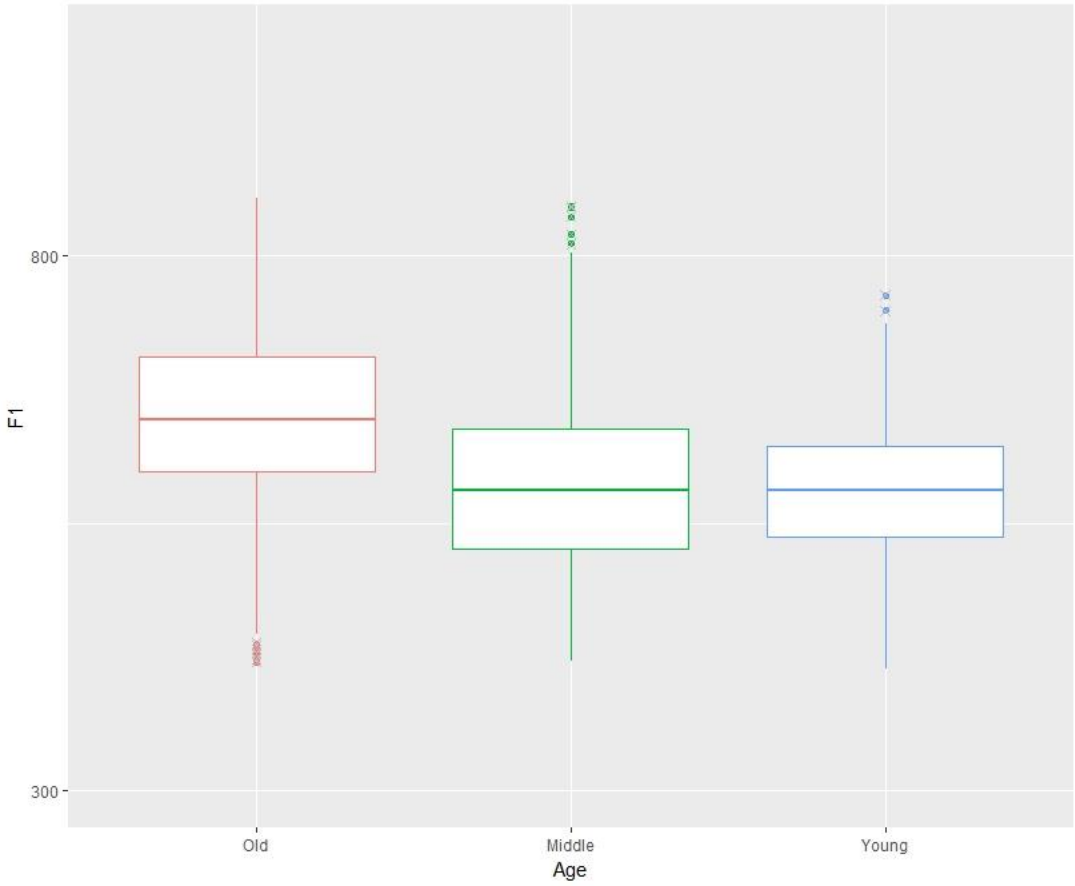


Figure 41: The spread of the height of word-final (a) by age.

The vowel height of word-final (a) also shows a gender-pattern in which females produced lower versions of the vowel than males. Figure 42 below shows a boxplot for gender in which we can see that females show a higher boxplot and inter-quartile box compared to that of males. This indicates that females had higher values of this formant and thus a lower version of the variable compared to their male counterparts. This was statistically significant with a positive coefficient (15.664; mean value of 624.179 Hz) for F1 produced by females compared to the negative coefficient by males (-15.664; mean value of 589.263 Hz).

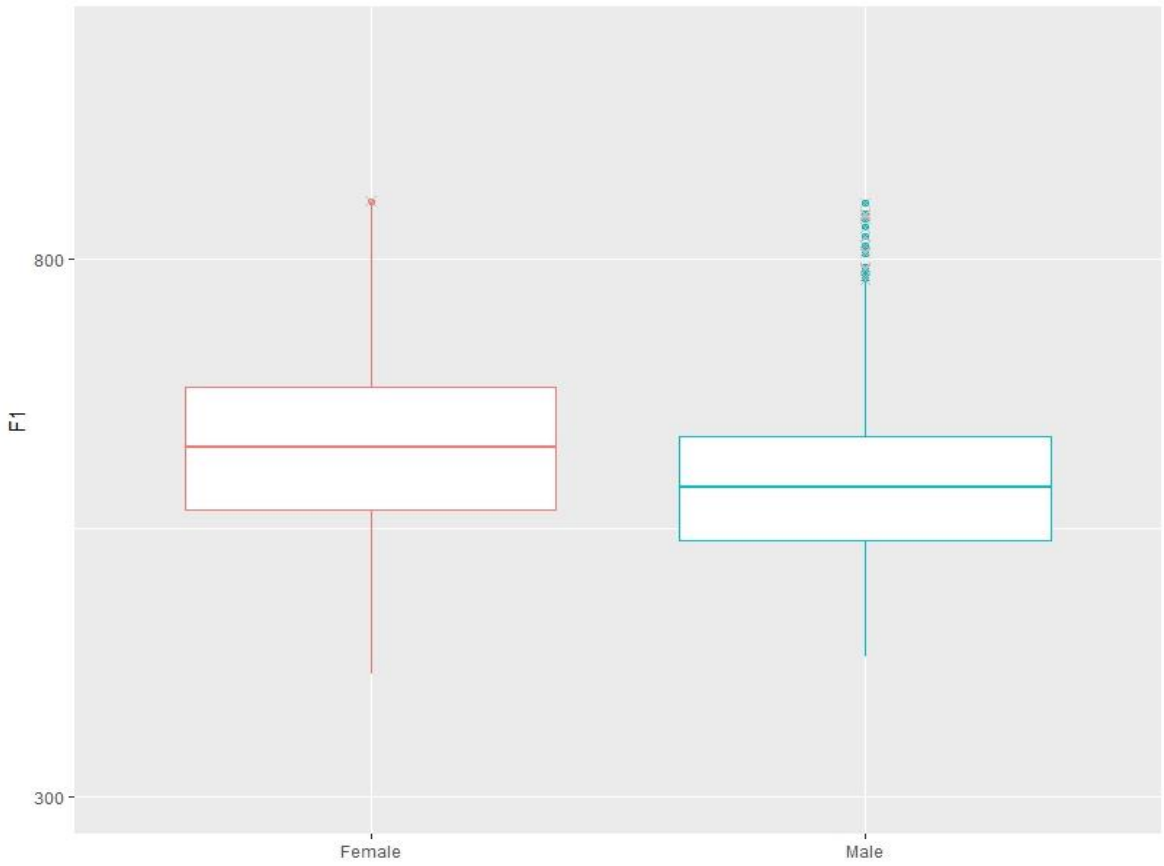


Figure 42: The spread of the height of word-final (a) by gender.

The statistical run for the production of this vowel's height has also shown an interaction between age and gender. In this interaction, the gender categories fared differently across the three age cohorts groups. Figure 43 below displays boxplots for the values produced by females and males across the three age cohorts. For the old speakers, the raising of word-final (a) is more advanced in females' speech than males. We can see in the figure that the box plots for these two groups are different. The distribution for the old females shows a bigger inter-quartile range box, which indicates rather more diffuse F1 values than those of old males whose inter-quartile is smaller and narrower and hence more focused production of F1 values. We can also see females' lower whisker (which represents the range of the bottom 25%, i.e. lowest of F1 scores) is further down than that of their male peers in the same age cohort. This result was statistically significant with a negative coefficient for old females (-4.634).

In the middle-aged group, it was males who had a higher production of the vowel than females, with a clearly lower boxplot than that of their female peers. In statistical terms, this was returned with a negative coefficient (corresponding to lower F1 values and hence a higher production of the vowel) for the middle-aged males (-14.931).

In the young group, females had a higher version of this vowel with a negative coefficient of -10.297. We can see from the figure that, while young males had a lower mean value, young

females had a more diffuse inter-quartile box and a lower twenty per cent quartile than that of their males peers, which indicates the least values in relation to the response (i.e. F1).

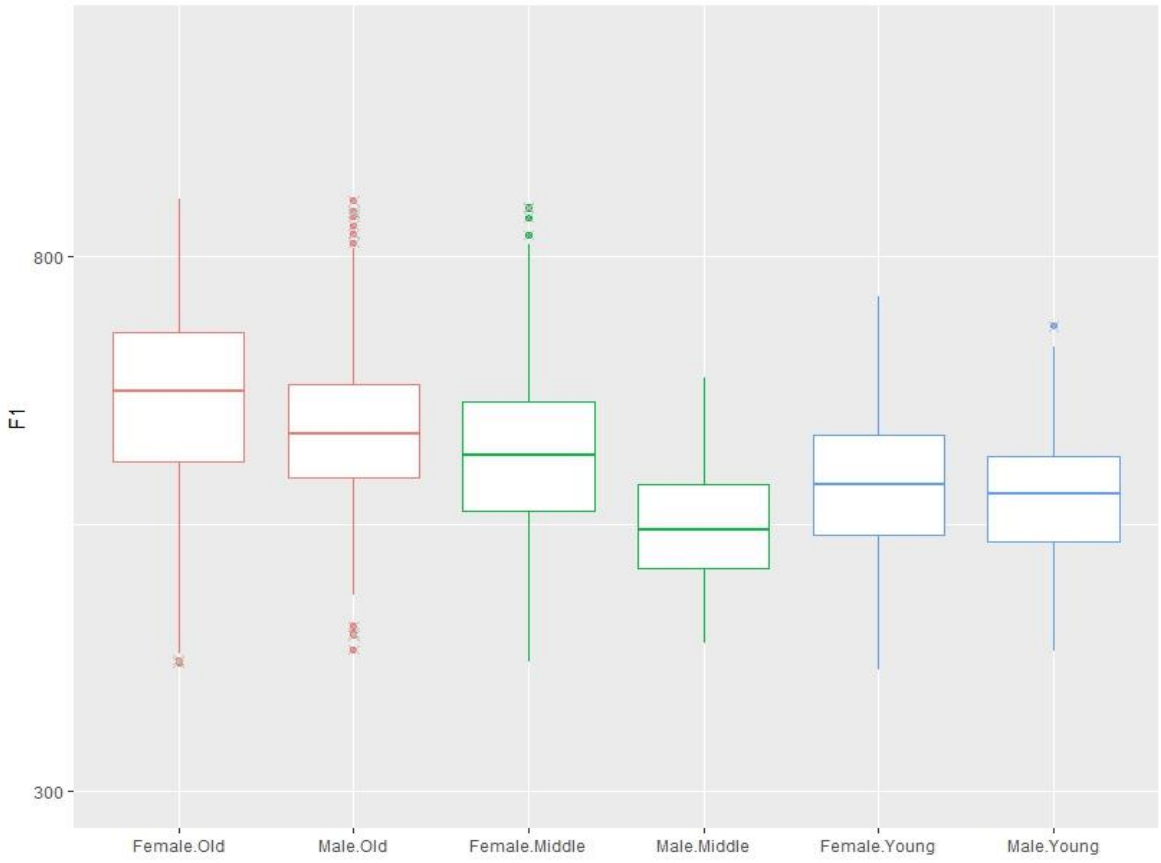


Figure 43: The spread of the height of word-final (a) by age and gender.

To see how class patterned in the height of this vowel, Figure 44 below displays the spread of F1 values by class categories. It can be seen that the boxplot of MC speakers is slightly condensed. This suggests a focused production of this vowel's height compared to the LMC group's diffuse boxplot. The median of MC speakers is lower than that of their LMC counterparts, which indicates a higher version of this vowel. However, the difference is small with an average of 604.447 Hz compared to 607.903 Hz for LMC speakers and this was not found statistically significant.

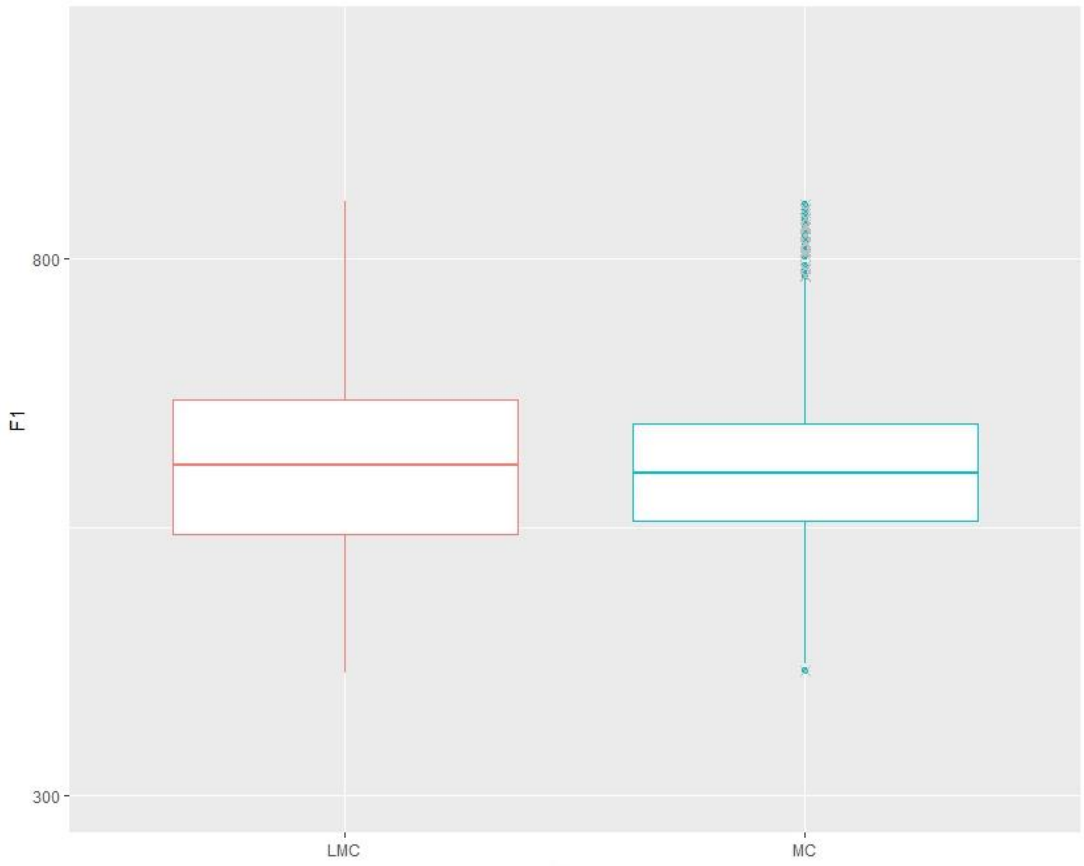


Figure 44: The spread of the height of word-final (a) by class.

To see how the height of this vowel patterned across the three social factors combined, Figure 45 shows us that the speakers vary in their realisation of this vowel's height. The prominent individual plots appear to be those of both gender and class categories of the old cohort who have a relatively higher F1 range compared to the rest. This indicates that their articulation of this vowel is lower in height compared to the other groups of speakers. This conforms to the overall age pattern observed in this vowel and all other variables in that old speakers tend to preserve the traditional realisations of the variables. It can also be seen that the interquartile range of male LMC speakers of the middle-aged cohort is relatively lower with a lower median compared to the rest of the groups. However, no interactions were found significant for the height of this vowel.

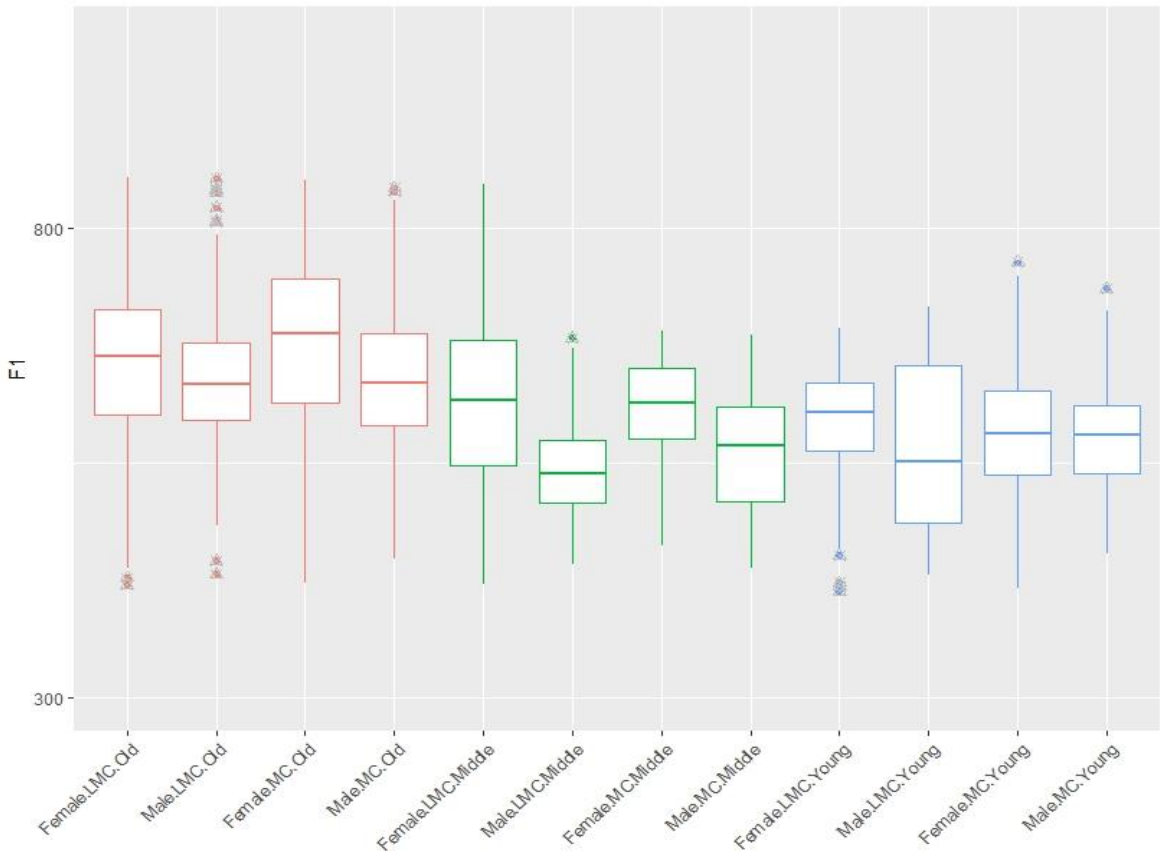


Figure 45: The spread of the height of word-final (a) by age, gender and class.

10.6.2.2 Second formant

The Rbrul run also reveals that the advancement of this vowel shows age and gender patterns. Table 24 below displays the results for this response.

Factor		Coef	Tokens	Mean
Age	Middle	54.921	894	1652.190
	Young	51.706	765	1655.830
	Old	-106.627	931	1491.673
Gender	Male	23.363	1336	1619.831
	Female	-23.363	1254	1569.714

Speaker mean	1595.566
Intercept	1599.418
Df	6
Tokens Total	2590

Non-significant factors (dropped from best model)

Class	LMC	[N.S.]	1290	1598.569
	MC	[N.S.]	1300	1592.586
Morphology	Stem	[N.S.]	765	1600.745
	Suffixal	[N.S.]	1825	1593.395
Part of Speech	Adjective	[N.S.]	481	1603.584
	Noun	[N.S.]	1196	1598.336
	Pronoun	[N.S.]	913	1587.713
Preceding Sound	Emphatic	[N.S.]	125	1630.097
	Non-guttural	[N.S.]	2275	1594.642
	Pharyngeal	[N.S.]	81	1585.29
	Uvular	[N.S.]	109	1582.883
Following Sound	Pausal	[N.S.]	496	1584.594
	Emphatic	[N.S.]	501	1594.545
	Pharyngeal	[N.S.]	673	1583.499
	Uvular	[N.S.]	171	1603.734
	Non-guttural	[N.S.]	749	1612.492

Table 24: Results of Rbrul model for the advancement of word-final (a).

In the age factor, we can see that this vowel was produced fronter by middle-aged and young groups than the old speakers who appear to be preserving the back realisation. This was statistically significant with a negative coefficient for the latter group, which indicates a lower F2 value and hence a backer realisation of this vowel. Figure 46 shows the spread of F2 scores across the three cohorts. It can be seen that the individual plot for the old group is lower than those of the young and middle-aged groups. This corresponds to lower overall F2 values and hence a backer realisation of this vowel compared to the younger groups who produced a relatively fronter quality of word-final (a). This finding is consistent with the age-

related finding reported for the vowel height (represented by F1) in which it was also shown to be undergoing a change with both middle-aged and young groups involved in that change.

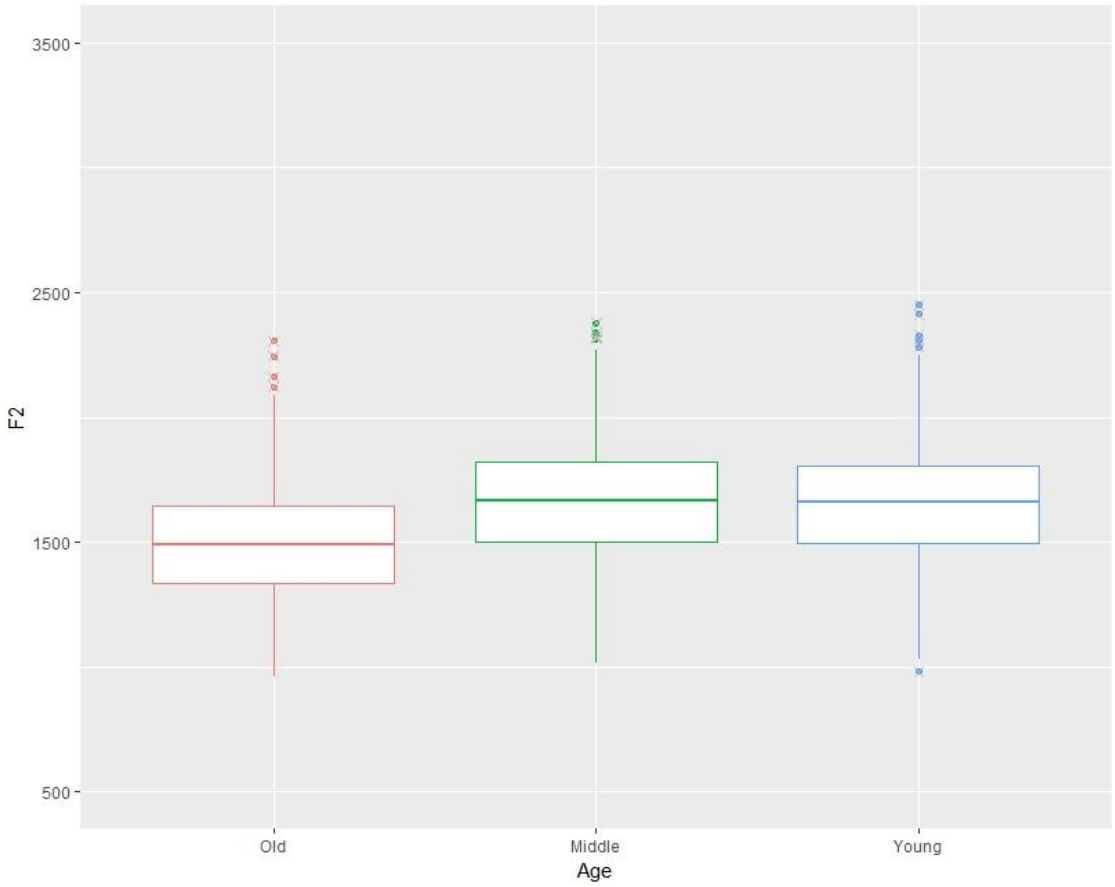


Figure 46: The spread of the advancement of word-final (a) by age.

The Rbrul run also shows a gender pattern in which males appear to be producing fronter versions of this vowel compared to females who overall had a backer realisation of it. Figure 47 below displays a boxplot for these two categories. It can be seen that females had a relatively lower boxplot than that of males, which indicates a lower overall F2 value and hence a backer realisation of this vowel than that produced by males. Statistically, this was returned with a negative coefficient for females compared to a positive coefficient for their male counterparts. This result is also in line with the gender results reported for the other variables (i.e. the rhotic variable and MOSUL vowel) in that females appear to be preserving more traditional realisations than men. An interaction between gender and age groups was assessed but was not found to be significant. This indicates that the gender effect becomes consistent across age cohorts once individual behaviour of speakers was taken into account.

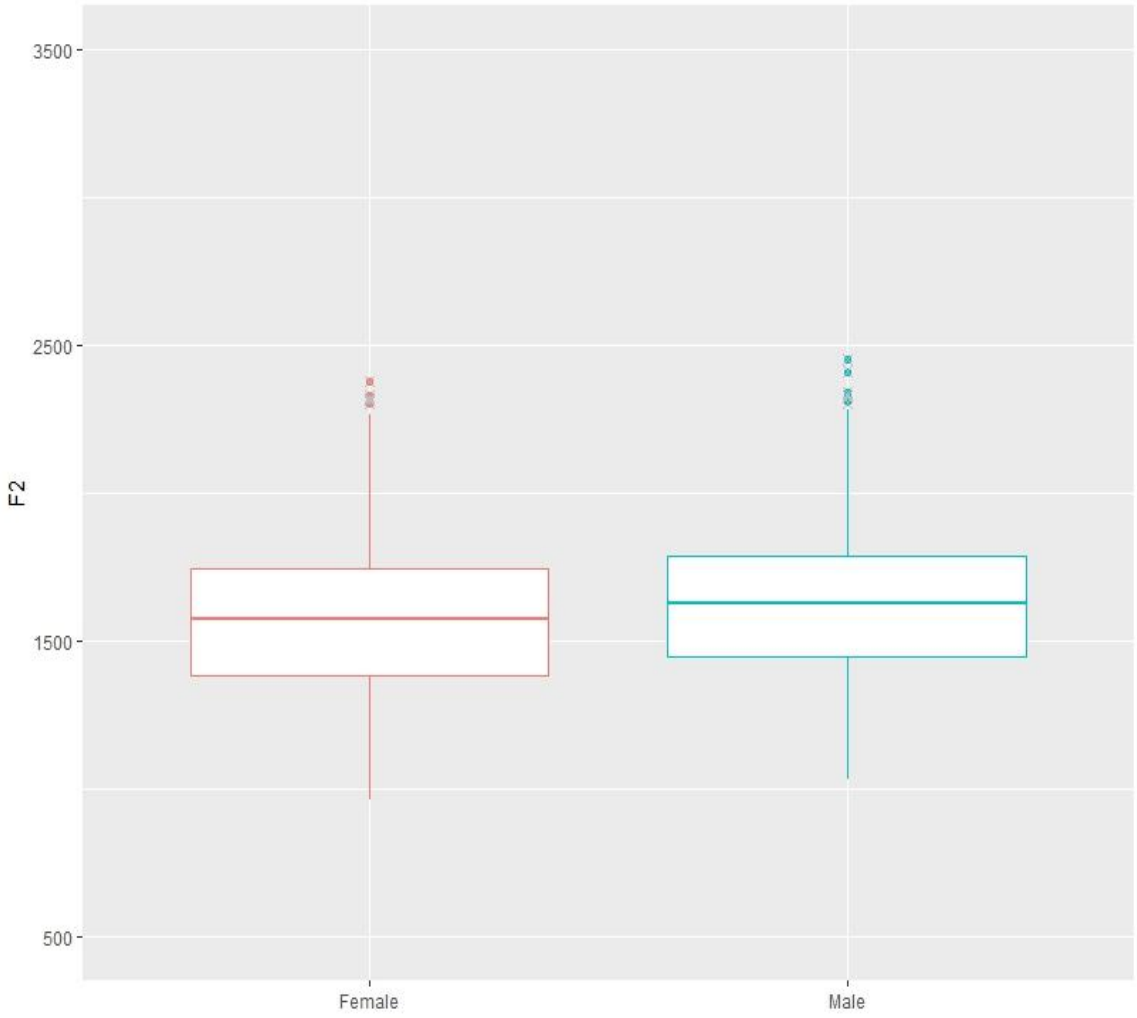


Figure 47: The spread of the advancement of word-final (a) by gender.

There does appear to be no influence of class on the degree of backness and frontness of this vowel as it was not found to be statistically significant. As can be seen from Figure 48 below, both MC and LMC groups show fairly uniform boxplots with rather similar median lines.

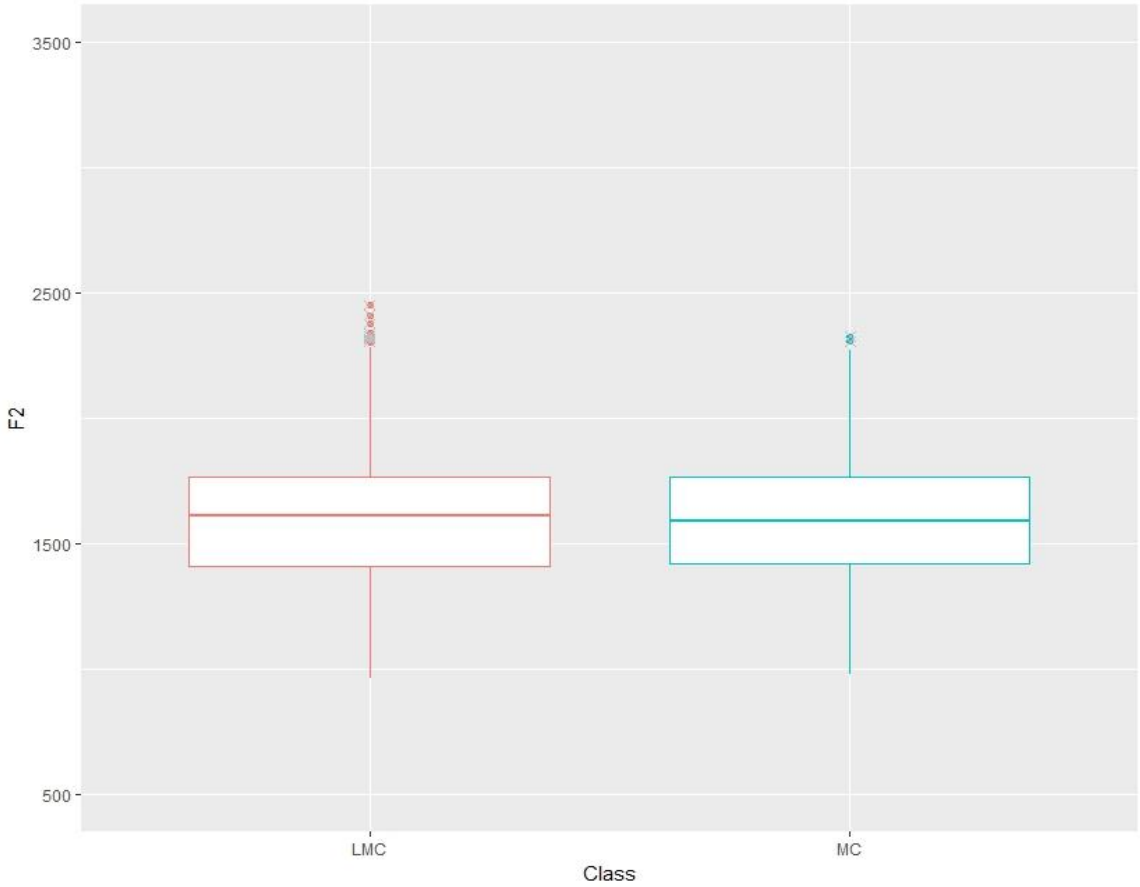


Figure 48: The spread of the advancement of word-final (a) by class.

In order to see how the advancement of this vowel patterned across all social factors, Figure 49 below displays the spread of F2 values across the subgroups of these factors. A glance at the figure reveals that the plots of gender and class groups of the old cohort are relatively lower than the rest. These indicate rather traditional back realisations of this vowel compared to the other groups who in turn had higher boxplots and hence fronter realisations of this vowel.

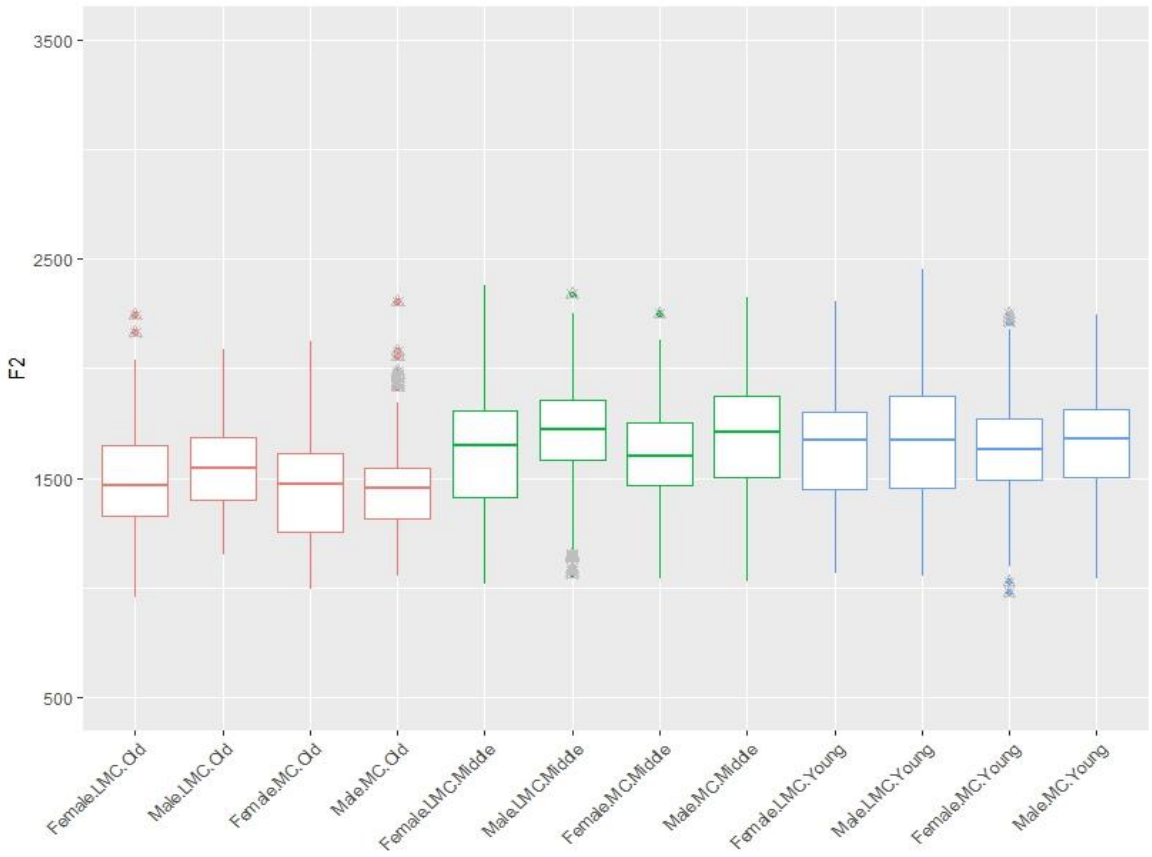


Figure 49: The spread of the advancement of word-final (a) by age, gender and class.

10.7 Discussion and concluding remarks

Now that the analysis of the vowel is presented, it is possible to discuss the findings. The duration of the vowel was found to be conditioned by type of the token in which it occurs. The analysis has shown us that the vowel was produced longer in pronouns than in word categories. The possible means to account for this is that it may be peculiar to the sample of this study. As has been mentioned earlier, there are no accounts on this variable against which to compare this particular finding and the results of the study in general. This study is, in many parts, a first foray into aspects of variation and change of this vowel in MA. Therefore, it is hard to arrive at a conclusive explanation given the lack of literature and thus any explanation suggested in this light remains tentative.

Results have also shown that there is a gender role in the articulation of word-final (a) in which males were found to be adopting relatively supralocal realisations of this vowel. This was manifested in terms of duration, which was overall shorter in the speech of males than their female counterparts. Likewise, this pattern was also evident in their higher and fronter renditions of the vowel. On the whole, male speakers appear to be shifting towards a *gelet*-like quality of this vowel.

On the other hand, females were found to be opting for longer, lower and backer renditions of the vowel. These indicate their preserving of the traditional quality of this vowel. These findings are consonant with the gender patterns observed in the rhotic and MOSUL variables in which males were shown to be adopting supralocal realisations of both of these variables. As such, it seems that we have a general pattern running through these three variables. In this pattern, males appear to be shifting away from the traditional realisations, which in turn appear to be maintained mostly by female speakers. Although the effect of class on the production of this variable was not found statistically significant, the illustrations have shown us lines largely similar to those observed in the other variables in which MC speakers appear be producing a supralocal quality of the vowel.

The results of the analysis of this vowel also revealed a change in apparent time in its duration. Young and middle-aged speakers appear to be opting for shorter versions of the vowel compared to the old speakers. Sociolinguistically, the generational differences between young and middle-aged speakers on the one hand and the old speakers on the other indicate a change in the length of this vowel in MA. As has been shown earlier, this variable is relatively longer in MA than in *gelet*. The significant discrepancies in duration that have been shown in the analysis of this study testify to a change towards the supralocal shorter form of *gelet*.

The vowel was also revealed to be showing a change in its height as well as in its degree of backness and frontness. Young and middle-aged speakers produced relatively higher and fronter realisations of the vowel than the old speakers who appear to be preserving the lower and backer realisation of it. To illustrate the change presented above, Figure 50 below displays a vowel plot showing the distribution of word-final (a) realisations across the three age cohorts. The young and middle-aged groups largely overlap and generally have higher and fronter realisations of the vowel than the old group. As has been shown earlier, these findings were found to be statistically significant.

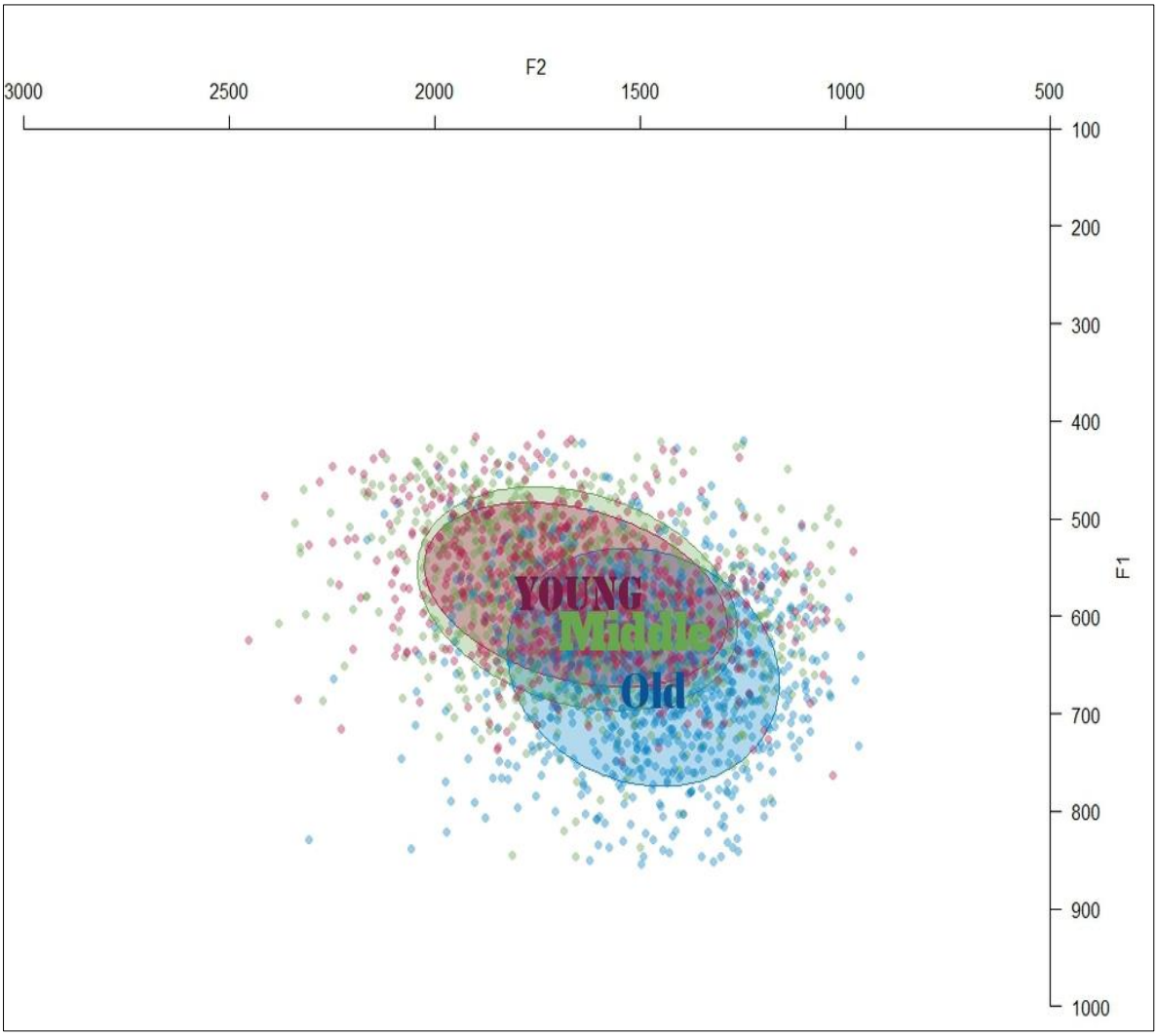


Figure 50: A vowel plot of the production of word-final (a) by age.

Thus, the change in duration, height and advancement of word-final (a) reveals that this vowel can be catalogued as another traditional feature that appears to be on the wane in Maṣlāwi Arabic. This finding is line with previous age-related findings in the rhotic variable and MOSUL vowel in that a change in the traditional realisations of those variables towards supralocal alternatives has also been attested. The age-related finding in this variable was also not surprising given the previous discussions on the social and demographic situation in Mosul (discussed in depth in chapter 11 below) in which it was hypothesised that its dialect is undergoing change.

To sum up, this chapter has investigated aspects of variation and change of word-final (a) in Mosul. This variable has received little attention in the previous literature on MA. This chapter has attempted to go some way towards addressing this gap in the literature. This could serve as a baseline for further investigations. This chapter has reviewed the references to its quality and the contexts in which it can occur. The analysis of this variable has revealed a

number of aspects that have not been addressed before. The vowel was found to be longer in duration in pronouns than in verbs and nouns, in which it was shown to be comparatively shorter. This vowel was also found to be produced shorter by young and middle-aged speakers compared to their old counterparts. This indicates a change in its traditional duration. A change was also attested in its height and advancement in that young and middle-aged speakers appear to be shifting towards a higher and fronter *gelet*-like quality of this vowel compared to the old speakers who appear to be preserving the traditional lower and backer quality of MA. There was also a gender pattern attested in which males appear to be opting for the supralocal fronter realisation of this vowel while females produced the traditional back realisation. This was evidenced by the statistically differences shown in the analysis for the production of this variable by these groups. It was also found that males favour higher versions of this vowel while females appear to be preferring the low traditional quality of this vowel.

By this chapter, the analysis of the four phonological variables has been concluded. Each chapter presented a discussion of each individual variable. The next chapter will bring together the findings and implications resulted from these variables and deal with them more broadly.

Chapter Eleven: Discussion

11.1 Introduction

The last four chapters have presented a discussion of the results of each variable individually. This chapter brings together the main findings of the previous chapters and discusses their broader implications in terms of the research questions and key concepts set out in chapters 1 and 5 respectively.

11.2 Revisiting the research questions

11.2.1 Aim One

1) The study seeks to provide a quantitative account of the current patterns of variation in respect of a set of phonological variables in the Arabic dialect spoken in Mosul, Iraq.

a) *What phonological variation patterns and observations can be discerned from MA with respect to the variables investigated in this study?*
b) *How does this variation pattern across the linguistic and non-linguistic parameters in the speech behaviour of MA speakers? And how can these patterns be interpreted?*
c) *What change can be noticed in the use of MA? And to what extent have MA speakers preserved local features and /or adopted supralocal ones? And how can how can the change observed be interpreted?*

This study has assessed a number of traditional phonological variables in Maṣlāwi Arabic. A number of observations in the literature on the behaviour of these phonological variables have been assessed. Over the course of the previous chapters, we have seen that while results of this study could not support previous studies regarding some aspects, they could however support earlier observations on MA, particularly those regarding an expected change in its phonological system.

11.2.1.1 The phonological variability of variables

The findings of this study have revealed that the phonological variables it examined are exhibiting more variation than what the literature describes. Results have shown that the rhotic variants in Mosul show more aspects in their envelope of variation and the linguistic constraints that condition them than what we have in the literature. The study has assessed statements of previous studies (e.g. Tawfiq, 2010) stating that the uvular form does not occur in certain environments such as diphthongs, palatal approximant [j] and velar fricative [ɣ]. The study has shown that this realisation does occur in these environments and, therefore, it

could not support Tawfiq's observations in this regard. The study has also produced novel findings on the traditional uvular variant in that it was found to be possible in different linguistic contexts. Particularly, it has testified to the occurrence of this variant in almost all phonological environments rather than just when in the contiguity of long vowels as was suggested in the literature. Thus, it is possible next to any vowel in the system of MA, whether short, long or diphthong. Furthermore, the study has shown that this variant can occur in different word categories in both stressed and unstressed syllables in onset, coda and gemination contexts. Therefore, what we have in Mosul is an across-the-board uvular variant of the rhotic variable. The study has also found that MA shows another established variant of this variable that is the vocalised form, albeit in smaller proportions than the other forms. The study has also assessed a long-standing observation in the literature that the vocalised production of /r/ in MA is a limited feature that occurs in a certain number of words. In this regard, the study has shown that this realisation can occur in almost all the different linguistic contexts observed for the uvular form.

Alongside these two traditional variants, the study has also shown that MA is showing more of the supralocal apical form of this variable. This form exists in the dialect through two external sources. The first source can be seen in lexical items from SA and other uses (e.g. religious and personal names), as has been described in chapter 7. The second source comes from the dominant *gelet* dialect spoken in Iraq through contact with speakers of this dialect. I will shed more light on this latter aspect later in this chapter when I come to discuss the change observed in the variables analysed in this study, not least in the rhotic variable.

The study has revealed that while variable (q) or *qāf* does not show variability in its social use, it does, however, show the supralocal variant [g] in its system alongside the traditional [q]. It was found that there are words in which /q/ is categorically realised as [g]. The study has suggested that this may be due to the unavailability of alternatives for these words in the lexicon of MA and thus these forms were adopted from *gelet* in their default realisation of /q/, i.e. [g].

This study has also observed greater variability in not only consonantal variables but also in vowels. In the MOSUL vowel, we have seen another case in which previous conditions on the occurrence of a traditional realisation form could not be supported in this study. The study has shown that the traditional lowered realisation [oː] can occur adjacent to different sounds rather than just gutturals as was described in previous accounts. The study has also shown that this realisation can occur next to, e.g. nasals, fricatives and stops. Thus, it is another across-the-board feature in the system of MA rather than one limited by certain constraints.

Therefore, what we can deduce from the findings of this study is that the traditional forms of the rhotic variable and MOSUL vowel transcend the constraints previously described to be at work for their occurrence. These forms appear to be limitation-free in the system of MA given the various linguistic contexts in which the speakers produced them. These findings help provide more accurate statements and conclusions in the wider phonetic and phonological context of MA and *qeltu* in general.

The statements we have in the literature on these variables in *qeltu* can be explained by the fact that most of them have been endorsed as such without being re-assessed with a further analysis. Al-Wer (2014, p. 401) notes that the early dialectological and sociolinguistic research in Arabic has had methodological shortcomings parallel to those in the early works of the same fields in Europe. However, it is fair to say that the state of affairs of previous literature is justifiable. This is because the orientation and scope of previous studies were based on impressionistic observations gleaned from a limited number of informants with the aim of capturing overall linguistic descriptions.

11.2.1.2 The social variability of variables

The study has also revealed aspects of the social patterning of the four phonological variables. The production of the phonological variables was shown to be variably conditioned by the three social factors: class, gender and age. The following subsections will discern the key social patterns emerged from the analysis of the variables and will attempt to explain them.

1) Class

In the current study, class was shown to be structuring the production of the rhotic variable. In this factor, LMC speakers were, on the whole, shown to be using more of the local variants than their MC counterparts who overall produced more supralocal forms in their speech. Similar findings were also found in the other variables although with no statistical significance. In the MOSUL vowel, MC speakers were found to be producing an overall higher version of this vowel compared to their LMC counterparts. MC speakers were also found to be producing shorter and higher productions of word-final (a) compared to the LMC group. What we can see from these findings is a pattern in which the supralocal realisations of the variables are being adopted, if rather tenuously, by MC speakers more than their LMC counterparts.

Comparing the findings of the current study to other studies on the role of class in IA might be difficult given the almost complete lack of such studies in the literature. The paucity of studies is highlighted by Albirini (2016, p. 201) who notes that the relationship between class

and linguistic variation has not been investigated thoroughly in Arab societies because it is not easy to define this social attribute there. Al-Tamimi (2001, p. 74) argues that this paucity is because class is traditionally considered as inappropriate for this type of studies and often be overlooked.

The current study is a first attempt at examining the role of class in Iraqi Arabic variation and change as there are, to date, no previous studies on this role in IA. However, a comparison between the results presented above and those reported in other Arabic and non-Arabic dialects is worthwhile. The variationist literature has identified some recurrent trends concerning the role of class in the speech behaviour of speakers, particularly in present-day Western communities. Recall that previous sociolinguistic research (e.g. Labov, 1966; Trudgill 1974) has often viewed change in linguistic use as a change from below or above. In fact, this research has found that many sound changes observed in speech communities can be explained by what Labov defines as 'the curvilinear principle'. This means changes originating from below the level of conscious awareness tend to be particularly evident in the speech of centrally located social groups. In Western contexts, these groups are represented by the upper working classes or the lower middle classes. This is because these groups tend to naturally have contact with social groups of either side of them in the social spectrum, i.e. the lower and the higher social classes (Labov, 2001, pp. 516-517).

Despite cases of change from below have been quite the trend, cases of change from above have also been reported. Tagliamonte (2011, p. 57) highlights that the term 'above' *per se* needs not to indicate a change coming from a high position of socioeconomic scale in the society. She also highlights that what lies at the core of this change is where the forms are coming from regardless of whether they are prestigious or not. Trudgill's study on Norwich (1974) provides an exemplifying context in which nonstandard forms coming from London were found to be making their way into the speech of other cities in the UK.

Cases of change in the speech of higher class people have been found in numerous studies (e.g. Mathisen, 1999; Mees and Collins, 1999; Watt and Milroy, 1999). For example, Horvath and Horvath (2001) found that middle class speakers were found to be more likely adopting L-vocalisation in Australian and New Zealand English than speakers from other class groups. Another change has also been reported by (Williams and Kerswill, 1999a) in which middle class speakers, particularly young, were found to be using more TH-fronting[171] than others.

[171] TH-fronting is the collective term used to refer to the realisation of /θ/ and /ð/ to /f/ and /v/ respectively.

Class-related patterns have also been reported in studies on Arabic dialects, particularly in cases of changes from above. Al-Tamimi (2001) investigated the phonetic and phonological variation in the speech of rural (*fallāḥi*) migrants in the Jordanian town of Irbid. He found that there was a high correlation between the speech forms of his informants and their class in that it was found that the higher the social class, the higher the use of supralocal variants. He also found that the local features were found to be associated with the lower class speakers. However, in a study on the dialect of Ḥomṣ, Syria, Habib (2010) did not report any effect for class on the speech behaviour of her speakers. Likewise, in his study on Cairene Arabic, Belnap (1992) found no correlation between the speech patterns of his informants and their class.

What we can deduce from the conflicting patterns reviewed above is that social class operates differently across communities. A look at the vast sociolinguistic literature reveals that each factor varies in its effect and interpretation from one place to another. Therefore, caution should be taken when it comes to making a generalisation, particularly in an area like the Arab region. In this regard, Albirini (2016, p. 199) reasons that the complex nature of Arab societies renders it difficult to make broad generalisations. In fact, part of this complexity stems from the particularity of speech communities that needs to be taken into account when trying to make sense of the class-related speech patterns. Along this line, Bassiouney (2009, p. 134) also adds that the diverse nature of Arab society forms a missing point in how the outside world conceives this society.

It seems that where there is a role of class on variation and change in speech forms of Arabic dialects, it is in line with the often-reported trend elsewhere. The studies reviewed above show us that the orientation of speakers of higher-class backgrounds towards supralocal innovative forms is also a trend that is often reported in cross-linguistic studies. Pipe (2014, p. 79) points out that if a process of levelling is in operation, there appears to be a tendency that speakers with a middle class background are in the lead of this levelling process. It is generally agreed that people with higher-class backgrounds using more innovative forms can be ascribed to a number of reasons. Campbell (2013, p. 197) notes that the consensus in the literature is that a linguistic innovation or change is often initiated by people with a high social status and an important position within their community. Campbell (ibid.) notes that such people interact more with the wider society and maintain more contacts within and outside their locality than those of lower class backgrounds. Generally, people of higher class backgrounds are exposed to more than just their immediate environment largely through their daily dealings practising their professions, jobs and through other channels.

The overall view from the results of this study (whether those statistically significant or otherwise) indicates a change from above in Mosul in which Maṣlāwis are adopting supralocal forms at the expense of their local ones. The linguistic change observed in Mosul is socially motivated and brought about through contact with migrants who have been coming to Mosul over the past decades and are gaining more social and demographic dominance in the city. Therefore, the increasing contact between Maslwis and these groups is propelling a change in MA towards more *gelet*-like speech forms. As noted earlier in 5.4 and further discussed later in this chapter, this change is drawing more awareness and commentary by Maṣlāwis as regards a retreat in the use of MA in Mosul as a result of their social (and by extension linguistic) mixing with the migrated *gelet*-speaking communities.

Middle class speakers in Mosul largely cluster in modern purpose-built neighbourhoods on Sāḥil al-aysar. This part of the city, as indicated earlier and as discussed further below, has expanded in terms of residential areas and governmental institutions. Several neighbourhoods were built to accommodate the migrants as well as Maṣlāwis. These have facilitated more contact between the two groups compared to the old, traditional Right Bank of Mosul. This latter side of the city has seen little change in its demographic composition and spatial structure with traditional markets and old alleys form the core of it.

2) Gender

In the current study, gender was also shown to have an effect on the speech of Maṣlāwis. Females have been shown to be using more traditional forms of the rhotic variable, MOSUL vowel and word-final (a) than males who overall produced more supralocal realisations. In the rhotic variable, females were shown to be ahead of men in using the local uvular and vocalised forms and in disfavouring the other forms, which were produced more notieceably by males. In the MOSUL vowel, male speakers were also found to be using a higher (albeit this particular finding was statistically insignificant) and shorter version of the vowel. In word-final (a), males were also found to be using the supralocal high front quality of this vowel. Albeit statistically insignificant, male speakers were also found to be producing shorter versions of word-final (a) compared to female speakers. The analysis has also shown us that gender interacts with age in the production of this latter variable. Specifically, the height of this vowel was shown to be different for men and women in all three age-groups. While males produced higher versions of the vowel in the middle-aged group, females were shown to be producing a similarl quality in both old and young groups. Albirini (2016, p. 194) notes that the majority of studies on the role of gender in Arabic linguistic variation reveal that gender interacts with other social parameters in conditioning language variability and thus the

patterns that emerge cannot be solely ascribed to gender. The study has also found that females have overall produced lower versions of this vowel compared to males. Likewise, the advancement of this vowel has also shown a gender pattern in which females appear to be preserving the back realisation of this vowel whereas males produced fronter realisations of it**.** These findings are consistent with the general gender and age patterns found in this study in which females and old speakers tend to use more traditional variants than male and young speakers respectively.

In fact, the role of gender *per se* in language variation varies as different patterns have been observed in the variationist studies on that role. It has often been found that males and females show clear differences in the use of local and supralocal forms. Particularly, male speakers tend to prefer more local forms to supralocal forms, which can often be found in females' speech. Labov (2001) surveys some of the literature on gendered variation in which it can be seen that women of all age and class categories tend to opt for more standard variants and innovations than men usually do. Labov concludes that when there is a change, women tend to be the leaders no matter what class background they come from and that men lag at least one generation behind their women counterparts in their use of linguistic innovations. Labov (ibid.) reports, for example, a female-led linguistic change in Philadelphia, in which women were found to be showing more extreme /uw/-fronting than men.

However, although patterns of female-led change were found in most studies, counter-examples have also been reported. There are many previous studies (e.g. Docherty *et al.*, 1997; Kerswill and Williams, 2000; Labov, 1966; Macaulay, 1976; Milroy, 1980; Trudgill, 1974; Williams and Kerswill, 1999a) that have revealed that males and females use their speech forms differently. Particularly, while females were found to be mostly leading a linguistic change in some cases, men rather than women were found to be assuming such a role in others. To take an example, t-glottalisation[172] is one of the spreading changes in UK dialects that have been found to be showing contradictory gender-related results. While in some communities it has been males who lead this change (e.g. Kerswill, 2003; e.g. Marshall, 2001), females were found to be the leaders in others (Mathisen, 1999; e.g. Milroy, Milroy, Hartley, *et al.*, 1994). Baranowski and Turton (2014) have also reported a male-led change in T-glottalling and TH-fronting in Manchester. In her study on TH-fronting, Holmes-Elliott (2016) examined the effect of gender on this feature in Hastings, southeast England and found it as a 'male-led' change. This was also the case in a number of studies (e.g. Britain, 2005; Llamas, 1998; Mathisen, 1999; Milroy, 2003; Williams and Kerswill, 1999a, 1999b) that have

[172] T-glottalisation can be defined as the realisation of /t/ as a glottal stop.

reported a gender effect on this feature in British English dialects. In other studies (e.g. Schleef, 2013; Stuart-Smith, 1999), no gender difference was found in the spread of this change.

Different interpretations and explanations have been suggested in relation to the conflicting patterns in terms of gender. Labov's (2001) ascribes the differences in the gender-related linguistic behaviour to corresponding parenting differences performed by women and men in which women, in most societies, assume principal child-rearing responsibilities. Labov also reasons that women's linguistic use functions as an exemplar more than that of men. The 'role model' line of reasoning has also been supported by other scholars such as Holmes (2012, p. 168) who adds that women are expected to maintain the values of their society and also use standard linguistic forms when they talk. Another explanation is suggested by Trudgill (1972) who argues that women's adoption of innovative linguistic variants can be explained by their status-consciousness, which stems from their urge to make up for their feeling less secure in terms of social position. Therefore, they are aware of what it means to use particular linguistic forms. Holmes (2012, p. 167) highlights that women's status-consciousness is so conspicuous in their linguistic production to the extent that they are often reported to be overusing some forms.

The general pattern that can be observed in the literature is that females often tend to lead the change, whether from above or from below. However, the gender-related findings are complex and subject to different considerations. Eckert (1998, p. 66) highlights that the cultural differences in gender-related roles and norms largely rest on how the relationships between women and men are organised in the society. The literature on Arabic dialects has reported different gender-related linguistic patterns that seem to conform with and, at the same time, contradict the trends reported in the Western societies discussed above. Women have been reported to be ahead of men in their use of supralocal innovative forms in some communities, while the reverse is true in others. There are several findings on Arabic dialects that show both men-led and women-led patterns. For example, Al-Wer (2007) reported that her women informants were ahead of men in the use of the non-local forms in Amman. She also found a similar trend in another study (1991) on phonological variation in three towns in Jordan. Her results on the use of four variables — (q), (θ), ($d^{ʕ}$) and (dʒ) — revealed that while women were found to be alternating between local versus non-local realisations of those variables, men were not found to be doing this.

However, Arabic-speaking communities remain a context that does not often square with the often-reported patterns of gender-related speech differentiation. Robust generalisations about

whether sociolinguistic patterns in Arab societies are compatible with those in the west have proven rather elusive. Research on Arabic dialects has reported findings that perhaps do not fit neatly into the established trends observed in the western sociolinguistic research. In a study on the families of Fess that migrated to Casablanca, Hachimi (2011) found that Fessi men rather than women were ahead in adopting the Casablancan trill pronunciation of /r/ at the expense of their local Fessi approximant variant. Other studies (e.g. Jabeur, 1987; Walters, 1991) reported similar gender-related findings in the Tunisian cities of Rades and Korba. Haeri (1991) surveyed the use of the (q) variable in three groups of speakers in Cairo, Amman and an international group from Egypt. She reported that the most noticeable finding from the three samples was that males used higher rates of the standard [q] than females. Dendane (2014, pp. 148-149) notes that there still remains a question on the applicability of the universal trends and theories in Arabic-speaking contexts. Indeed, findings from this study and other investigations on Arabic dialects offer interesting insights into how gender-related speech behaviour can differ from one community to another. A universal generalisation in terms of notions or interpretations applied may, therefore, come into question.

The case of Mosul echoes the foregoing trend-defying findings on gender and offers an interesting contribution to the discussion. The current study has shown that males (in both significant and insignificant results of the variables showing change) appear to be ahead of females in leading the change taking place in MA. The dominant gender pattern of the variables assessed here provides evidence in support of a male-led change in this dialect. While this finding may not be readily reconciled with the often reported gender-related trend, it gives an interesting insight from this less-investigated Arab context. It also calls for considering the peculiarities of the community that can elucidate the differences observed. In order to further explain this gender-related pattern in an Arabic-speaking context like Mosul, we need to appreciate the role of gender in Arab societies, which is, in fact, markedly differentiated. Torstrick and Faier (2009, p. 113) note that the religious and cultural beliefs are distinctly shaped for both men and women and these, in turn, condition their movement as well as other opportunities in the society. Like many Arab societies, the social conditions of Mosul and Maṣlāwis provide a plausible explanation for the social patterning of their linguistic behaviour discussed above. Mahmood and Hasan (1992, p. 214) remark that there are historical factors that have moulded the social life of the community of Mosul in which more importance is attached to the social cohesion and on maintaining strong and bonded family relations. Mahmood and Hasan (ibid.) note that the family plays a major role in establishing and sustaining many behavioural and ethical values in the Maṣlāwi society and in strengthening cohesiveness between family members against external influences. Al-khalidy

(2007, pp. 107-108) sheds more light on the Maṣlāwi family and points out that, like the Arab family more generally, it is patriarchal in nature where the husband or father assumes authority. This, in fact, indicates that the patriarchal system of Mosul entails males having a greater exposure to the wider spheres of the society. In this regard, Al-khalidy explains that this type of patriarchal family system that thrives in Mosul results in two modes of roles. The first pertains to males in which they tend to carry out more tasks outside the house. He provides an example in this regard is that other male members of the family exercise similar roles in the father's absence while they continue to pursue their father's (most likely their grandfather's too) calling at an early age. Most Maṣlāwis maintain a tradition in which the sons go with the father to his workplace, without affecting their education, to get training on the business while giving a helping hand in the process.

The other role is peculiar to women in which the average Maṣlāwi woman (known as *umm bēt* 'mother of the house') largely maintains traditional functions in managing and raising children (Alkhaledy, 2007, p. 115). In fact, the mother-daughter relationship in most Arab societies tends to be very close and lifelong. It continues even after daughters seek their own life after marriage. Abudi (2010, p. 5) notes that the ensuing interaction between the mother, being the primary caregiver and the children (particularly daughters) is fundamental not only in shaping the children's adult development but also in defining a number of individual aspects such as constructing self and gender-related roles. Another important aspect of this relationship is highlighted by Bassiouney (2008, p. 190) who notes that women in the Arab world tend to demonstrate their power through other channels such as their children and that this power is noticeably reflected in language. Bassiouney also notes that this is often to compensate for their lack of power in other contexts.

Mosul is no different to this type of mother-children relationship, particularly as regards daughters. This seems evident in the type of roles that Maṣlāwi mothers have in this respect. While fathers create a role model for their male children to follow, mothers tend to play a similar role in raising their daughters domestically. Alkhaledy (2007, p. 115) notes that the role of an average Maṣlāwi mother involves managing the affairs of the house, educating and guiding the children to what qualifies them in their lives. Special care is paid here to maintaining tutelage over her daughter(s) and raising and keeping them within the domain of their household chores rather than pushing them to the forefront.

These conditions would very likely result in rather disparate speech patterns for male and female members of the society depending on the environment to which they are more exposed. On the one hand, a domestic environment that is particularly between female

members of the family who would have more interaction between them. On the other hand, an environment of the outside world, which is more open to male members as explained above. The general conditions tend to be more conducive to males having a greater interaction with the larger community and hence a greater exposure to the mix of speech patterns therein. They are thus more conscious of the social norms and pressures that exist in the community and more amenable to linguistic changes.

There are some rather similar conditions and linguistic outcomes observed in Iraq and other Arab contexts. In his study on Baṣra, in southern Iraq, Bakir (1986) presents a similar explanation for the gender-related linguistic differences he observed in the speech of Baṣrāwis. He attributes them to the gender-distinct social environments in which women assume more insular modes of life compared to men. Along with other cultural and social considerations, the conditions referred to above restrict their access to supralocal linguistic forms, he believes. This is true of several areas in the Arabic-speaking world such as Rades, Tunisia (Jabeur, 1987); Tlemcen, Algeria (Belhadj-Tahar, 2013; Dendane, 2007), Damascus, Syria (Daher, 1998b); and the Saudi city of Jeddah (Al-Essa, 2008) where males and females were reported to be using different linguistic forms under exposure conditions similar to those described above. For example, in a study on dialect contact and variation in the city of Jeddah, Saudi Arabia, Al-Essa (2008) found that the traditional Nağdi forms were the preserve of old women. She ascribes this to women's lack of contact with and access to other speakers, unlike men whose contacts with Ḥiğazi dialect speakers in daily life are greater.

It appears that Mosul displays a rather similar situation to those reported above. The social patterning of the linguistic behaviour of Maṣlāwis is reflected in the environment and conditions of the community, as discussed above. In a society where males and females have their own discrete social roles, it would be expected to find disparate conditions of exposure to the different linguistic forms that exist in that society. In her discussion of gender, Bassiouney (2009, p. 149) notes that it is expected that women and men in the Arab world maintain modesty and honour as two core values in their communication and general interactions in life. She notes that this runs through the culture of the Arab region, albeit with some disparaities. Britain (2010, p. 202) highlights that some groups of a community may have different interaction experiences with people outside their immediate environment. This results in them having disparate contact opportunities with the outside world (hence non-locals) with consequences on their speech behaviour in the form of maintenance and levelling or, to use Britain's term 'supralocalisation', of linguistic features. The next section on age will

bring the theme of levelling into sharp focus in which I will try to explain how and why this levelling is unfolding in Maṣlāwi Arabic.

3) Age

As has been noted earlier, this study seeks to track changes taking place in MA with reference to the four variables investigated in this study. We have seen in Chapters 7, 9 and 10 on the rhotic variable, MOSUL vowel and word-final (a) respectively that there are some vigorous elements of change in the speech of Maṣlāwis sampled in this study. Particularly, it was shown that there are statistically significant differences in the use of local *vs.* supralocal forms, which indicate a change in the phonological system of MA over time. The apparent time view of the data demonstrates that a process of levelling is indeed taking place in MA in that traditional forms of these variables are receding in favour of *gelet*-type alternatives. This change is exemplified in the statistically significant differences between generations in which young and middle-aged cohorts appear to be converging on more *gelet*-type forms while the traditional forms appear to be the preserve of the old generation.

The literature has furnished us with many age-related patterns as regards the use of linguistic forms. A number of changes and innovations such as T-glottalisation, TH-fronting, L-vocalisation[173] and H-dropping[174] in English dialects have been reported to be promoted in the speech of young speakers. See (e.g. Hickey, 2015; Johnson and Britain, 2007; Jones and Esch, 2002) for a discussion of these features. Cheshire (1987, p. 768) notes that an appreciation of the role of age usually necessitates examining it in combination with other social factors such as social class, gender and ethnicity. A number of studies (e.g. Kerswill, 2003; Stuart-Smith and Timmins, 2006) have shown that working-class young males are leading the change in TH-fronting in some UK communities. Macaulay (1976) reported a correlation between age and class in the linguistic behaviour of his Glaswegian speakers in that the class-based differences in speech forms increase as age increases. There are also some cases of change in which only age is at work. For example, Chambers (1995) found a lexical change in the use of the word 'couch' rather than 'chesterfield' in Canada to be conditioned by only age while no effect was found for other factors such as social class or gender.

The literature on levelling of linguistic variability has shown that the use of innovative supralocal forms increases as age decreases whereas the maintenance of traditional local forms is associated with older generations. There are many studies that have reported this

[173] L-vocalisation is a process in which a lateral approximant [l], largely velarised 'dark' [lˠ], is realised as a vowel or a semivowel.
[174] H-dropping refers to the deletion of word-initial /h/.

trend particularly in British English and its different dialects (e.g. Flynn, 2012; Hilton, 2010; Milroy and Milroy, 1985; Milroy, Milroy and Hartley, 1994; Watt, 2002; Watt and Milroy, 1999; Watt, 2000; Williams and Kerswill, 1999a) to name but a few. It is generally agreed that adult speakers are viewed as maintainers of traditional variants while younger speakers have a greater tendency to adopt supralocal alternatives. For example, Wolfram and Schilling (2015, p. 147) highlight the often-reported finding in which young speakers tend to adopt the innovative forms more quickly than the older speakers of the community. Holmes (2012, p. 177) reasons that adapting to external pressures becomes more noticeable in the early stages of adult life while this diminishes in later stages. Therefore, unlike their younger counterparts, older speakers often tend to be characterised by traditional norms of speech as they drift into a more nonchalant way of life.

Similar to the above-mentioned trends in Western societies, the literature on Arabic dialects has consistently reported a young-led linguistic change. This is evidenced in a number of studies (e.g. Al-Rojaie, 2013; Al-Wer, 1991; Dendane, 2007; Ismail, 2007; Jabeur, 1987) in which young speakers were reported to be using different speech forms from their older peers. To review some of these studies on age, Al-Rojaie (2013), for example, investigated the effect of a number of social variables such as age, gender and level of education on variability patterns in the use of /k/ affrication in Qassimi dialect of Naǧdi Arabic. His results revealed that old speakers, both men and women, tend to maintain the realisation of the affricated form [ts] of /k/ while his young informants, especially females, opt for the supralocal non-affricated form [k]. Ismail (2007) investigated the variation patterns in two variables: i) the rhotic variable and ii) the presence or absence of the glottal fricative /h/ in the plural suffix /-hon/ and the third-person feminine suffix /-ha/ in two areas in Syria. Ismail found that her young speakers tend to lead the change in the use of the approximant variant of the rhotic variable in Šāġūr reasoning that this group of speakers has greater interaction opportunities with non-locals in this locality. Other studies also reported similar tendencies such as Dendane's (2007) study on Tlemcen, Tunisia in which he found that Tlemcenian young speakers tend to abandon the debuccalised [ʔ] local form of /q/ and opt for [q] and [g]. Abdel-Jawad (1986) reported that many of his Jordanian speakers adopt urban stop and sibilant forms of four variables he investigated (/q/, /θ/, /ð/ and /dˤ/) at the expense of the local interdental ones. In Iraq, Ahmed (2012) also refers to a change in the *qeltu*-speaking town of Hīt. He ascribes this change to the contact between Hīti old generations and non-Hītis, which has been far less in comparison to the young and well-educated generations. Albirini (2016, p. 209) notes that in Arabic-speaking areas, the opportunities of contact that old and young generations have with speakers of other dialects are disparate. The old generations' exposure opportunities to

linguistic forms of other dialects are fewer compared to the younger ones. Social changes, immigration patterns and the advent of advanced technologies are all factors he cited as reasons for such contact-related disparities between Arabic-speaking generations.

The patterns observed in Mosul are no different to those reported in other Arabic-speaking areas and cross-linguistically, at least from the perspective of adopting supralocal forms. This study has shown that Maṣlāwi younger generations show more of the supralocal apical form in their speech than their older counterparts. Likewise, the traditional quality of word-final (a) and the MOSUL vowel is getting recessive among young and middle-aged speakers. These findings confirm the hypothesis that MA is drifting towards *gelet* and also provide sound evidence in support of the impressionistic observations in the literature that suggested a change in the dialect. In addition, the fact that middle-aged speakers participate in this change may well indicate this change has been around for a while. This finding, however, is not surprising since that the city has been under the influence of *gelet* for decades now, as we will see in more detail below.

Al-damluji (2014) highlights that the role of young generations in adopting non-Maṣlāwi speech forms has been noticeable. Alkhaledy (2011, p. 394) notes that although Maṣlāwis are keen to transfer the values cherished by the family, the Maṣlāwi society has seen changes in traditions and social patterns that used to be mainatined by Maṣlāwis. In fact, these changes may be well illustrated by the fact that Maṣlāwi women are now getting more involved in different social roles as doctors, engineers, teachers and other professions in the institutions of the state and society in general. This is coupled with the social changes that encompassed their growth as they have grown up over a period during which Mosul has become a hub for a diluting mix of people with greater contact between Maṣlāwi and non-Maṣlāwi inhabitants. Their linguistic behaviour has thus come into contact with supralocal competing forms at an early stage in their life. These conditions are more conducive to a change that is more visibly advanced in the speech of young people than others.

In order to better understand and contextualise this change, an appreciation of the contact between Maṣlāwis and the migrated groups of people is necessary here. In chapter five, it was sketched that the sociopolitical events are prime conditions for a change to occur, as these would have linguistic repercussions. Elyas (2013) points out that there are a number of reasons behind the gradual decline in the use of Mosul's dialect. The first factor he mentioned is the migration in and out of the city. This has intensified over the past decades for several reasons such as desertification and drought, which affected many farming and agriculture areas in the outskirts of Mosul. Elyas (ibid.) notes that Mosul has been a destination for many

Iraqis. He cites one of Mosul's residents saying:

> Mosul is always open to any other Iraqis who want to come to live here. We're not afraid of them and we integrate them into our own community.

As will be seen more clearly from the discussion below, Mosul has emerged as an area that is undergoing contact with other dialects as a result of migration and other sociopolitical reasons. Elyas points out that internal migration has resulted in repercussions on the dialect spoken in Mosul highlighting that locals "fear" that a lesser use of their dialect could lead to the loss of one of the pillars that distinguish Mosul's local culture.

The migration of people to a different community is often cited as one of the main driving forces for a linguistic change. One of the frequently reported consequences is a process of dialect levelling in which traditional realisations are abandoned (Trudgill, 1986, p. 98). Milroy (2002) takes a similar stance that dialect levelling is a change that often occurs as a result of migration and mobility situations. Kerswill (2006, p. 2271) notes that migration of people is a major factor of external linguistic changes and that is of profound demographic and sociolinguistic consequences on communities.

These conditions of migration and concomitant contact are often cited as conducive to accommodatory behaviours between the different speakers in contact. Everyday short-term accommodatory behaviour occurs in the immediate face-to-face communication dealings between speakers. In this process, linguistic convergence gradually becomes entrenched and turns into a long-term practice (Auer, 2007; Auer *et al.*, 2005). As has been discussed earlier in chapter 5, speakers converge on the speech of their interlocutors to maximise their social integration with them or may distance themselves linguistically from them to emphasise or maintain their distinct identity (Coupland *et al.*, 1991; Giles *et al.*, 1973). Speakers often react to the shifting state of affairs of their societies taking linguistic variation to account in order to achieve certain goals. These range from *inter alia* integration or disintegration in a community, constructing identity (e.g. an ethnic, social or religious). However, Deumert (2004, p. 4) notes that despite the importance of this identity-related linguistic behaviour in inducing change, there are also other change-inducing factors such as migration, urbanisation and industrialisation that bring people from different areas into contact. Deumert highlights that increased contact between people and mutual exposure to the linguistic systems contribute to sustained linguistic convergence.

In fact, these factors are often reported to have far-reaching effects and the literature has discussed a number of possible scenarios that result from such a context. Auer (2007, pp. 110-111) highlights that when people get into contact, more than one outcome may ensue

depending on the situation of each community. For instance, it may appear that the incoming dialect may become superseded by the local dialect of the receiving community as the migrated group would relinquish their speech habits out of durable contact. Auer (ibid.) also refers to another possible outcome is that the receiving community's speech may become recessive in the face of the migrated group's forms. Auer cites an example of this latter outcome in which people from Brabant, Belgium immigrated *en masse* to the Hague–Amsterdam. Consequently, their Brabantish dialect considerably influenced the receiving Amsterdam dialect. It seems that a considerable movement of people is a condition for such a scenario to materialise. Watt (1998, p. 81) notes that a substantial exodus of people to a new area is a propeller of linguistic levelling as it would be more likely for their linguistic influence to appear than a few immigrants could possibly do.

A number of accounts (e.g. Al-khalidy, 2007; Alkhaledy, 2011; Azeez, 2011; Elyas, 2013; Mahmood and Hasan, 1992) have referred to a similar large-scale movement of people into Mosul for a variety of reasons. While we lack official records to get an idea about the exact figure(s) of this migratory movement, the scale of it is nevertheless felt on the part of Maṣlāwis. Elyas (2013) in this regard quotes a Maṣlāwi resident saying:

> We are strangers in Mosul now, villagers have invaded our city. These villagers are taxi drivers or they own grocery stores. We're not against them and we do not hate them. But it is true that they're dominating our environment and obliging us to change our dialect.

Regardless of which side is dominating the demographic structure of the city, the effects of the non-Maṣlāwi inhabitants appear to be surfacing in the linguistic shape of MA even if we assumed those inhabitants are still not the majority in the city. By way of illustration, an analogy of yeast can be drawn here in that non-Maṣlāwis seem to be catalysing a change in Mosul's traditional dialect. They serve as the determinants of a fermentation process that has resulted in the well-risen society of Mosul. This speaks to how this group of people, especially of Bedouin-type of culture, can be a key element of linguistic changes to develop. This latter aspect of Bedouin-type society will be further discussed later in this chapter when I come to address Aim Two.

A recourse to the precipitating factors that resulted in bringing swathes of *gelet*-speaking speakers into Mosul is key to understanding the scale of this migration. It is also key to understanding an important phenomenon that underlies the levelling case observed in Mosul— Bedouinisation, which I will return to in more depth further below.

Recall that levelling is a cross-linguistic process that appears to be operating in many parts of the world. This is due in large part to a number of factors (e.g. increased immigration, human

mobility, globalisation and demographic shifts in certain areas) that are often reported to be inducing this process. While the extent and applicability of factors precipitating linguistic change depend on the historical and social settings of communities, universal trends can still be gleaned from the Arab region and other parts of the world.

As discussed earlier, early linguistic research of Arabic has approached levelling through the influence of Standard Arabic, being the prestigious form, on the dialect(s) spoken in a community. The often cited factor behind this change is the increase in education, which affords speakers more exposure to SA. However, other studies (e.g. Al-Wer, 1997; Gibson, 2002; Hachimi, 2005; Haeri, 1996) in Arabic-speaking sociolinguistic research found that linguistic levelling observed in Arab communities does not necessarily involve the influence of Standard Arabic. Rather, it is linked to a dominant dialect in each Arab country as a result of different precipitating social, geographical, political factors that are peculiar to each country. Therefore, the linguistic levelling taking place in Arab societies has something to do with another dialect in the society rather than SA. A good number of studies (e.g. Abu Haidar, 1991a; Al-Essa, 2008; Al-Rojaie, 2013; Habib, 2010; Hachimi, 2005; Mohammed and Al-Heety, 2018) dealing with levelling in linguistic systems in Arab societies substantiate this trend, as reviewed earlier. Much of this research has shown that the process of levelling presents a rather more complex picture than the mere pursuit of whether it is linked to SA. For example, Bassiouney (2009, p. 121) highlights that there are degrees within the process of levelling citing an example from Egypt where this phenomenon has nothing to do with the prestigious Egyptian Arabic. Bassiouney reasons that this may have to do with the fact that levelling is not solely contingent on prestige but also on other factors such as the status of the speaker and political ideologies.

Scholars of Arabic sociolinguistics have emphasised the importance of the overarching precipitating factors of levelling. Not least of these factors is urbanisation being a key socioeconomic change in the Arab countries. This has largely facilitated the movement of people from rural to urban settings. Miller (2007, pp. 1-2) notes that until the mid of the previous century, the population of most Arab countries was predominantly rural and that has now transformed into an urban one. There have been linguistic changes as a result of the movements of people in the wake of urbanising large areas of Arab countries. Indeed, phenomena such as urbanisation and migration with a concomitant rise of certain groups of people in Arab communities have reshaped the societal and linguistic composition of those communities. Iraq is no exception to what other Arab countries, more conspicuously the oil-exporting ones, have seen of linguistic effects stemming from such changes. One of the main

facilitators of the migration in Iraq has been a shift toward urbanisation in the country following the expansion of its oil production and exports in the mid-twentieth century. Migration from rural to urban centres has involved Iraq with Baghdad as a key example, as discussed earlier and further below in 11.2.3. Mosul offers another major example of urbanisation and resultant shifts in Iraq. Miller (2007, p. 9) refers to the spatial effect of urbanisation, which resulted in expanding urban suburbs. In Mosul, similar effects have been evident as new residential areas were built while others expanded. These were to accommodate the increasing number of locals as well as the Bedouin migrants who moved to the city in the aftermath of the agricultural decline and other political reasons, as will be discussed further below. This occurred largely on the Left Bank (known as the modern part of the city of Mosul), which has extended beyond the area of Aswār Ninawa 'Nineveh walls', i.e. the old area of Nineveh. As a result, the Left Bank has emerged as a large residential area accommodating people from Mosul and those coming from outside the city (Khudir, 2011). Al-Wattār (2011, p. 233) points out that the population growth in the city of Mosul from the 1950s onwards has notably increased due in large part to the rural-to-urban migration, particularly after the annexation of more villages such as Rašīdiyya and al-Arbağiyya to the city of Mosul. Al-Wattār (ibid.) also notes that this has led to a demographic change in the city in general.

Another important factor in this migratory movement in Mosul was the Arabisation policy: a government-administered policy towards displacing non-Arabic-speaking minorities in parts of northern Iraq, including in and around Mosul. Those areas were repopulated by Bedouins hailing from the desert to the southwest of Mosul. Elyas (2013) also attributes the migration to Mosul to the security situation after the Gulf war in 2003. As discussed earlier in chapter 5, a notable phase of the sectarian conflict that developed after this war has led to people of restive areas of Iraq seeking refuge in the city of Mosul. Mosul has gone through the two phases of the struggle. On the one hand, it was a place where the violence took place and caused many people to escape. For instance, many Kurdish families abandoned their homes in the districts of ʿAdan, al-Karam and al-Bakir on the Right Bank. Likewise, tensions and violence in Mosul forced many Christians to move to the nearby villages in Nineveh Plains Sahl Naynawa such as ʿAlqōsh, Tel Asquf, Berṭilla and Qaraqosh (Mufti, 2004, p. 10). On the other hand, Mosul has also served as a destination of refuge for the displaced people from other areas (Al-Khalidi and Tanner, 2006). Mosul has received a wave of Arab families displaced on sectarian grounds from other provinces of Iraq, namely Baghdad, Ṣalāḥ Ad Din, Diyala and Baṣra, in the aftermath of the Sāmarra bombing in February 2006. This has had its effect on the demographic situation of Mosul (ibid.).

It appears that the conditions and events sketched above have made Mosul a hub of contact between Maṣlāwis and the people migrated to the city. These in turn brought the speech norms of Maṣlāwis into contact with those of migrated people (all speak *gelet*) and thus a change has emerged in the traditional Maṣlāwi dialect, as this study has shown. However, while this study has confirmed a decline in the use of MA, the change in Mosul does not seem to be overwhelmingly sweeping the dialect. The use of supralocal forms in the speech of young and middle-aged groups has not as yet reached a near-completion state although it might be going that way given the conditions that might induce such a trend in their linguistic behaviour. There was also no complete loss of traditional forms of any of the phonological variables investigated in the speech of young generations. Moreover, the variable *qāf* is notable in this regard in that the traditional variant [q] seems to be maintained by Maṣlāwis. However, this is not surprising given this particular variant has never been completely lost in previous linguistic change waves (as will be discussed below) with many [q] forms still coexisting in *gelet* alongside [g]. In addition, the uvular plosive variant [q] does already exist in the speech of non-Maṣlāwis. This is coupled with the fact that [q] is increasingly being used in most modern dialects of Arabic due to the spread of mass education, which brought these people to more exposure to SA. However, although the behaviour of the speakers showed an overall consistency in the use of this variable with no statistically significant differences between them, there is one finding that perhaps deserves some attention. The data revealed instances of [g], particularly in the young group, which may indicate signs of an incipient change. We have also seen that there are some words such as [garaːjəb] ‘relatives’ and [gaweːni] ‘a pack of sacks’ in which [g] is categorically realised rather than [q]. It was suggested that these have been adopted from *gelet* as there seem to be no alternatives for these words in the dialect of MA. This also leaves us with some food for thought in terms of a change although we lack previous research to confirm this was a result of an earlier phase of change involving these words. Palva (2009, p. 25) reveals that such a change has been reported in other *qeltu* dialects of the Euphrates group such as ʿĀna, Hīt and Dayr al-Zawr where a change in the traditional realisation of [q] has started in words such as [naːga] ‘camel’, [gahwa] ‘coffee’ and [baːg] ‘he stole’. This observation has also been reported by (Blanc, 1964, p. 27; Jastrow, 1978a, p. 42). Palva (2009, p. 25) suggests that this Bedouin-type change may have been operating for generations in Hīt. He explains that this change was found in the speech of the informants of Khan’s study (Khan, 1997) despite a forty-year gap between this study was conducted and the time when his informants moved from their native city of Hīt to Beersheba. A similar change has also obtained in other urban dialects such as

Maġribi Arabic in which voiced velar forms have surfaced as in, e.g. [bagra] ‘cow’, [girba] ‘waterskin’ and [gniːn] ‘rabbit’ (Boucherit, 2002; Heath, 1989).

Although the overall result of the realisation of [g] is not significant in Mosul, it may, however, raise the possibility that a change, albeit partial, may develop over time. However, this needs to be taken with caution and further research may be needed to ascertain whether a change is /will be occurring in this form or not.

In summary, while showing no signs of a complete erosion, MA is experiencing a change in its phonological system where localised forms are being abandoned by younger generations in favour of Bedouin-type *gelet* alternatives as the dialect is being contested by an increasing community of *gelet*-speakers. This leads us to the next aim and related questions posed in this study.

11.2.3 Aim Two

2) The study will exploit the linguistic situation of MA to advance/refine our understanding and interpretation of dialectal landscape in Iraq.

a) *What does the case of MA add to the overall picture of Mesopotamian dialects spoken in Iraq?*

b) *How can the findings from this study and those drawn from other qeltu dialects in Iraq inform and be informed by past trends observable in their development?*

As has been discussed earlier, Mosul has received waves of Bedouin people over the past decades. The ensuing contact between Maṣlāwis and the migrated communities appears to have precipitated a change in MA’s traditional forms. These communities are largely of Bedouin background as well as urban dwellers who speak a *gelet* dialect, which in turn is linguistically Bedouin-type. This brings us to discuss an important phenomenon that has been underlying this change in MA and pretty much Iraqi Arabic in general—Bedouinisation.

Closer inspection of what we have in Mosul and other *qeltu*-speaking areas shows us that there is a reasonable amount of comparability and several parallelisms that can be demonstrated between them. Bellem (2008, p. 189) notes that the varied dialect distribution in Iraq is a reflection of how people moved and settled in this country over the past centuries. Indeed, as we will see below, past and present changes involving these two dialects have possibly operated along similar lines and can thus serve as a useful yardstick to explain, at least, the situation of *qeltu* dialects in Iraq.

As has been noted earlier, the previous movements of Bedouin people into areas of Iraq can be broadly constructed as two waves of Bedouinisation. In what follows, I will also argue that

the situation of *qeltu* in Mosul and other areas provide enough grounds to reconstruct their current state of affairs as the third wave of Bedouinisation.

Drawing on the findings of this study and the previous (social and concomitant linguistic) Bedouinisation waves, we can discern the big picture of the behaviour of this dialect. A number of essential similarities can be gleaned and upon which I here construct the constituents of the third wave in two main aspects: causation and outcome.

11.2.3.1 Causation

As has been discussed earlier, what seems to be at the heart of change in Mosul is the migration that has been occurring in the city for decades. The lack of irrigation resources as well as the sociopolitical factors (e.g. urbanisation and Arabisation) have led to the influx of people largely villagers and peasants of Bedouin origin to Mosul seeking better life prospects in the wake of hardened conditions that affected their main source of income—agriculture. Those people are locally known as *ǧaryāwis* and are now the de facto majority of the city's population. They are also viewed as the main reason why MA is retreating. Mahmood and Hasan (1992, p. 217) point out that this migration means the city is caught in a mix of two social groups having two contrasting modes of living. One pertains to the Bedouin-type people who have long lived according to their own culture norms, patterns of behaviour and customs while the other concerns the urban sedentary type of culture of the Maṣlāwi society with its different values. This mix eventually results in the prevalence of one of the two types or a new pattern emerges. Elyas (2011) goes long the same line pointing out that this migration has strengthened the influence of tribes and tribal values on the urban life of Mosul. Mahmood and Hasan (1992) highlight that the migration from the countryside to the city of Mosul has led to the Bedouin people infusing the community making use of the availability of sufficient opportunities in the educational and military sectors. The effects of these developments have been felt in the city as now the sons of the peasants have become colleagues or schoolmates to the original dwellers of the city and many of them became teachers or professors or bosses in different civil and military institutions (ibid.). Furthermore, dedicated neighbourhoods in the Left Bank were built to house the migrated people that turned the city into a sprawling area.

Similar effects had also occurred in the previous waves. As discussed earlier, new garrison towns were built in Kūfa and Baṣra in south Iraq in the first wave, which served as home to the Bedouins who migrated from Arabia. Versteegh (2001) explains that in the early Islamic conquests, which brought Bedouin immigrants to the newly built garrison towns, a concomitant process of urbanisation began. In the second wave, there can be seen rather

similar urbanisation projects aimed at accommodating Bedouins coming to Baghdad. In this regard, Abu Haidar (1988b, pp. 74-75) refers to a building programme that was launched in the late 1950s to create new conurbations in Baghdad. Abu Haidar also notes that this programme also involved the levelling of some old areas. This in turn resulted in Baghdadi residents of those old areas to move to the newly built conurbations. These conditions have put Baghdadis in close contact with the migrated communities. This was further supported by increasing social contacts and education that contributed towards bridging the gulf between the communities. On the linguistic level, this was reflected in the levelling of many linguistic differences between them (ibid.).

The factors observed in Mosul have, more or less, also operated in other *qeltu* areas. Kirkuk has also been the subject of the Arabisation policy, which caused a change in the demographics of the city and the linguistic situation of its community (Shanks, 2015). Arabs moved from their lands and settled in the north (Kirkuk, Mosul) encouraged by financial incentives and affordable homes. Under similar incentives and encouragement from the central government, Bedouin clans from the desert-dominated al-Jazīra region moved to resettle in and around Kirkuk. Thus, the city had seen a dramatic rise in its Arab population (Knights and Ali, 2010). Tikrit has also seen a surge of rural-to-city migration over the years caused by urbanisation and availability of civil and military job prospects. The same can be found in the *qeltu*-speaking town of Hīt, which has seen waves of migration (discussed later in this chapter).

The past waves had also involved a political and social rise of the migrating communities as well as a role of the political system at the time. In the first two waves, the Islamic Caliphate and the Ottoman Empire that ruled Iraq brought the Bedouins to the area. In the current third wave, the role of Arabisation policy launched by successive Iraqi governments throughout the second half of the 20th century brought the Bedouins into new territory and put them in contact with people of the *qeltu*-speaking receiving towns. These people grew in number and social importance to assume different civil and military ranks. Therefore, what we can see from the above is that there is a discernible congruence in the causative factors of Bedouinisation running through the three waves, notwithstanding the particularities of those factors in each era.

11.2.3.2 Outcome

An important element running through the three waves have been the parallel linguistic outcomes across the different eras spanning those waves. The broad line that can be gleaned from those outcomes has been the dominance of *gelet* over *qeltu*. As has been discussed

earlier, in the first wave, Iraq's southern parts up to Baghdad experienced Bedouinisation, which led to the remarkable decline of *qeltu* in the face of dominating *gelet*. Bedouin-type linguistic features such as the affrication of /k/ (i.e. realisation of /k/ as [tʃ]) crept into those areas although these features remained conditioned in use.

In the second wave, Abu Haidar (1991a, 2006b) reported a process of levelling in Baghdad that resulted in the decline of *qeltu* features in Baghdad and the corresponding dominance of *gelet*. Abu Haidar showed that phonological (alongside syntactic and morphological) features such as palatalisation of [eː] into [ie] and the replacement of [q] by [g] made their way into the speech of Baghdadis. Al-Ani (1976b, pp. 51-52) and Abu Haidar (2006b, p. 272) explain that this can be ascribed to the exodus of people from the south to the capital. There are also other social and political factors that contributed to the linguistic effects of this wave. These can be seen in the rise of Bedouin-type people to the helm of power throughout the latter half of the 20th century as well as the dwindling number of *qeltu*-speaking people (i.e. Christians and Jews).

What we can see from the above is that a notable outcome of the past waves was a process of levelling in which traditional forms of *qeltu* succumbed to *gelet* alternatives. Levelling is also considered a koineisation process. Versteegh (2001) Abu Haidar (2006b) and Palva (2009) have all referred to processes of koineisation and levelling that resulted from those past developments. The consensus that can be drawn is that what we have today is a *gelet*-based koine showing a mix of features from both dialects *gelet* and *qeltu*. This related theme will be discussed further below.

The linguistic outcome of the two previous waves above has developed in ways analogous to the current situation in Mosul and other qeltu-speaking towns. This study has shown that local features of MA are being taken over by *gelet* Bedouin-type equivalents. Mosul is actually not the only *qeltu* dialect undergoing this type of change. Abu Haidar (Personal communication, February, 2017) remarks that Kirkuk and Tikrit are witnessing a retreat in the use of *qeltu* spoken there. However, it should be noted that no previous investigation has to date informed us of the nature and scope of this change. In Tikrit, Al-Jibouri (2016) observes that Tikrit's distinctive dialect is retreating especially given the city has received migrants from rural areas and has been serving as a haven for Iraqis fleeing their insecure areas as a result of the conflict after the war in 2003. Al-Jibouri notes that some Tikriti scholars, particularly in history, have put some effort into documenting Tikrit's "distinctive sounds". In this regard, he cites Riad al-Jaber who is native to Tikrit himself and scholar of local folklore saying:

> The dialect of Tikrit is very different from other Iraqi accents and dialect. That's why I've been trying to document it for years. Many of the words have started to disappear because of the evolving nature of the city's inhabitants and because of the security crisis, the way that locals are mixing with locals of other cities.

In her study on *imāla* in Tikrit, Rasheed (2015) also refers to a change occurring in this feature in the *qeltu* spoken there. She also remarks that other distinctive features in Tikrit such as the realisation of the variable (q) are also undergoing change. Rasheed (Personal communication, 2017, 11th July) ascribes this change to several reasons the chief of which is the rural-to-city movement of people, which has turned the city into a hub of different people mingling with Tikritis. In addition to these two towns, the effects of Bedouinisation have also been reported by Khan (1997) in Hīt, another *qeltu*-speaking town. Palva (2009, p. 25) believes that Bedouinisation may have very likely affected the Muslim community before the Jewish community of this town. In another study on the town of Hīt, Ahmed (2012) also highlights that old generations of Hīt, especially those with little or no education background, tend to preserve the traditional pronunciation forms, which are considered as a continuation of their ancestors'. On the other hand, he reports that young people are losing features of their forebears such as the Hīti traditional [oː]-like quality of the long vowel /aː/ in favour of *gelet* traditional [aː] as in [woːqif] *vs.* [waːqif] 'standing (m. sg.)'. In another study on levelling in the town of Hīt, Mohammed and Al-Heety (2018) found that there is a clear difference between the old and young generations of Hīt in the use of [q] *vs.* [g] with the latter variant being increasingly adopted by young Hītis. They reason that this change is due to the migration that the town has seen in its recent history.

What we see in the *qeltu*-speaking towns mentioned above is that they are, to varying degrees, experiencing the effects of similar sociopolitical factors and resultant (socio)linguistic repercussions. The Bedouin-type or rural migration appears to be creating contact between the original inhabitants of those towns and the migrated people. This is obviously leading to a shift in the *qeltu* dialects spoken in those areas. Thus, what we can infer from the discussion above is a third wave of Bedouinisation with parallel levelling of localised dialects in favour of the dominant Bedouin-type *gelet*.

Recalling that the past developments discussed earlier have resulted in a *gelet*-based koine with features from both *gelet* and *qeltu*, we are now in a position to discuss an important aspect of this wave— koineisation. Koineisation is a contact-induced phenomenon that occurs when a mixture of people speaking different dialects of the same mother language come into contact with each other (Kerswill, 2013). It typically involves the migration (resettlement) of people from other places into a new or pre-existing single place (Trudgill, 1986; Tuten, 2007).

The literature has mentioned a number of interrelated processes involved in this phenomenon including but not limited to levelling, mixing, borrowing and accommodation. The concepts of koine and koineisation have often been applied to other Arabic dialects, urban and non-urban, as a source of their genesis and changes in their system especially in areas that had seen successive waves of settlement (as is the case in Iraq). The literature (e.g. Blanc, 1964; Versteegh, 2001) has discussed that this process in Arab contexts has often entailed both, Bedouin and urban linguistic features. koineisation has its own history that goes back to the early Islamic era in which the Bedouin-type Arabic dialect was brought by the early Arabic conquests to the conquered territories, the dialect of which was sedentary. This historical context explains the current status of Arabic dialects having features from both Bedouin and urban dialects. A look through the literature shows us that a number of scholars (e.g. Holes, 1995; Miller, 2006; Palva, 1994; Versteegh, 2001) subscribe to this view.

At this point, we can tentatively also call the situation in Iraqi Arabic one of koineisation. It has been noted earlier that *qeltu* used to be the dominant dialect spoken in the urban centres in Iraq, regardless of the religious differentiations therein. As a result of the movement of Bedouin people, koineisation processes (e.g. levelling, sedentarisation) ensued and resulted in a koine showing a mix of urban and Bedouin features. The religious-based dialectal differentiations that developed between the communities in Baghdad subsequently lessened due to the decline of non-Muslim communities in Baghdad for various reasons (largely due to political and security reasons). Miller (2004, p. 11) mentions a number of similar cases in the Maġrib region of the Arab world. Versteegh (2014, p. 183) also remarks that there are cities such as Amman and Baghdad that have seen a dramatic wave of urbanisation, which incited an influx of migrants to those capitals. As has been discussed earlier, the migrants have come from their rural areas bringing with them their Bedouin-type speech habits. The ensuing contact between these linguistic forms and the already-existing ones has resulted in the development of prestigious dialects.

The long history of successive waves of migration and resettlement in Iraq with the resultant linguistic repercussions offer a platform for us to bring koineisation into the current discussion. It is worth noting that the position I take here is one that is more of a preparatory stance than an assertion as the focus of this study is on the variation and change in the speech of Maṣlāwis. However, as this wave of change shows clear similarities to the past ones, the case of Mosul does, as it stands, give us indicators for such a process to develop in the city. The current study has presented evidence of a mix of competing *qeltu* and *gelet* features with the former being levelled in favour of the latter. These developments are considered as initial

indicators of koineisation (Schreier, 2014, p. 621). The levelling of local forms in favour of supralocal ones in MA discussed earlier may well represent an initial phase of a koine given that people from outside Mosul have come into contact with Maṣlāwis. Moreover, through my experience with a number of non-Maṣlāwi residents (specifically *ǧaryāwis*) of Mosul, they pointed out that their own speech now combines a hybrid combination of features from both Maṣlāwi *qeltu* and their ancestors' *gelet*-type dialect. In light of the above, if the competition between *qeltu* and *gelet* forms we have and the past developments and outcomes are anything to go by, we can all but expect koineisation to be operating in MA at least in a burgeoning phase. Siegel (1985, p. 373) notes that at such a stage, for which he used the term "ferment stage[175]", the process of koineisation is at an initial, unstable state with a mix of variants of the donor dialects coexist. Siegel also refers to a process of levelling that occurs at this stage. Both of these two outcomes are now in place in Maṣlāwi Arabic, as far as the current study can tell.

Auer (2007, p. 110) points out that a koine develops as mutual accommodatory behaviour among the people in contact develops and becomes established. In most cases, accommodation tends to be actually mutual in that interaction or integration among speakers of these dialects develops in order to maximise the effectiveness of their communication and reach a mutual understanding. This study has approached the speech of Maṣlāwis and showed a reduction of local realisations in favour of alternatives from *gelet*. Therefore, it is worth mentioning that further research is needed to confirm and fully discern the process of koineisation in MA. This is to see if this process is operating in the behaviour of the other part involved (i.e. non-Maṣlāwis). This would, in a way, complement the overall picture of what has been discussed above.

It is hoped that the discussion of Bedouinisation and koineisation above has situated the findings of this study within the wider context of Iraqi Arabic dialects in its past and contemporary development. This would help us understand how the dialectal situation has been/ is now taking shape in Mosul in particular and Iraq in general. This is particularly of note given the major cities (e.g. especially the *qeltu*-speaking ones) are becoming more of a mixture of people coming in contact. Reinterpreting the past and present dialectal changes in Iraq in three distinct waves also helps understand what we know about the dialectal history of the country and puts into perspective previous and recent similar phenomena in a parallel and chronological framework. It thus provides a springboard for further research to study other

[175] The terms first used by (Moag, 1979).

qeltu-speaking towns where issues of change and variation undoubtedly exist but have not yet been approached. These will be dealt with in the next and final chapter of this thesis.

Chapter Twelve: Concluding remarks

12.1 Summary

This final chapter summarises some of the key conclusions that can be drawn from this study. It also outlines the contribution that this study has sought to make as well as a number of potential avenues of research on variation and change issues in Mosul and beyond.

This study has aimed at investigating aspects of variability and change in the Arabic dialect spoken in Mosul, in northern Iraq. This study was conceived to contribute to the literature by investigating this important yet insufficiently investigated dialect. It has sought to address gaps in the literature on the phonological and sociolinguistic behaviour of MA, as one of the distinctive dialects spoken in Iraq. Moreover, in view of the sociopolitical developments discussed earlier, this study has attempted to offer new insights on MA as regards a number of phonological variables selected for the analysis. These variables fall into two main categories: vowels and consonants, with two variables for each category. The data used in this study were subjected to auditory analysis (consonant variables) and acoustic analysis (vowel variables) and statistical analysis (both categories). This was to uncover the interplay between linguistic, extra-linguistic constraints on the behaviour of these phonological variables in MA.

The four phonological variables chosen for analysis are all traditional Maṣlāwi features. The study has investigated two consonant variables: the rhotic variable (r) and *qāf* (q). In the former, the use of uvular and vocalised forms in MA was assessed in relation to the supralocal apical variant of *gelet*. In the latter, the alternation between the voiceless uvular plosive [q] of MA and the *gelet* alternatives (e.g. [g] [k] [dʒ]) was also assessed. The study has also investigated two vocalic variables: the MOSUL vowel or (uː) and word-final (a). In both vowels, height, advancement and duration produced by the speakers was assessed and compared to that of *gelet*. The study has assessed a number of structural conditions that have been mentioned in the literature to be at play in the behaviour of these variables. In the rhotic variable, the study has established that the uvular realisation can occur in different phonological environments. It was shown that this form can occur in the environment of, e.g. palatal approximant /j/ and voiced velar fricative /ɣ/. Thus, this form was shown to be not restricted by these contextual constraints in MA. The study has also found that this form can occur in different verb conjugations as well as different word categories such as nouns and adjectives in both stress and unstressed syllables. It was also found that this form can occur in onset, coda and gemination contexts.

The study has also established that this variable has a vocalised variant in MA. In this regard, the study has testified to the occurrence of this form in all possible positions and that it is not

limited to certain words as has been thought to be the case. The current study has found that this form can actually occur in different structural capacities, e.g. neighbouring sound contexts, stress and syllable positions as well as different word categories. Thus, the study has confirmed that this variant is indeed an established form of the rhotic variable in Maṣlāwi Arabic.

The study has also investigated (q) or *qāf* in Mosul and revealed that this variable was produced with little variation by all speakers. It was also shown that [q] is not the only variant of this variable in MA as a number of words such as [garaːjəb] 'relatives', [geːwəl] 'desire' and [guːnəjja] 'sack' were not produced with the typical variant of MA (i.e. [q]). Rather, /q/ in these words was categorically realised as a velar plosive [g] by all speakers.

In the vowels, the study has also found that several conditions reported in the literature on the MOSUL vowel do not necessarily exist. It was revealed that the traditional realisation (e.g. [oː]) is not solely limited to guttural environments as was previously described to be the case. Furthermore, results have shown that this actually is an across-the-board realisation that can be found in different word categories and phonological environments. Taken together, these findings tell us that the traditional realisations of these variables are not necessarily limited in their occurrence as was described in the literature and are indeed established features in Maṣlāwi Arabic.

As one of the main aims of this study, the social patterning of the phonological variables has also revealed a number of aspects. In class, it was found that MC, rather than LMC, speakers favour the supralocal forms, more evidently in the rhotic variable. This was also shown to be the case in the production of MOSUL vowel and word-final (a), albeit this behaviour was statistically insignificant. The study has also highlighted the gender-based behaviour in Mosul in which women were found to be using more of the traditional realisations than males. Gender was also found to be interacting with age in which males and females were found to be behaving rather differently in the use of supralocal and local realisations of word-final (a). The study has given a possible explanation for these results that relates to the nature of the Maṣlāwi society, which draws discrete gender-related lines in that women have relatively less contact with the wider spheres of the society compared to men. This is true of many societies in the Arab world and thus it was no surprise to expect a linguistic behaviour that reflects this orientation.

Another important task of this study was to track a process of levelling that is believed to be underway in this dialect. The study assessed a number of observations in the literature that suggest a retreat in the use of MA local speech forms in the face of *gelet* alternatives. This

study analysed fresh data to assess this change and if so, to what extent this is actually happening as regards the above-mentioned phonological variables. The results have presented ample evidence that a process of levelling is occurring in MA in that Maṣlāwi traditional features are being abandoned, although not in a wholesale fashion. This was evidenced by the decreasing use of local forms in the rhotic variable (i.e. uvular realisation) in the face of the apical form of *gelet.* A similar trend was also found in the realisation of MOSUL vowel and word-final (a) in which the traditional realisations (in height, advancement and duration) of these two variables appear to be also decreasing. This was more conspicuously observed in the speech of young and, to a lesser extent, middle-aged speakers. The speech of these last two groups appears to be becoming less localisable compared to the older generation whose production has revealed a retention of the Maṣlāwi local realisations.

The study has discussed in depth the precipitating conditions that have led to the change in the demographic and social composition of the city, which has emerged as an area undergoing contact with *gelet*-speaking communities. The study has discussed how the city has received swathes of *gelet*-speaking people in the wake of different events occurred over the last few decades. These conditions have transformed the city into a hub in which *gelet* and *qeltu*-speaking people live together. These conditions are conducive to contact-induced change to occur with young and middle-aged generations are the leaders of this change. Contact conditions are widely described as facilitators of linguistic accommodation behaviours as speakers tend to reach maximum communication between them. The change observed in the speech of Maṣlāwis was shown to be resulting from the movements of people (largely Bedouin and rural) that have been affecting the social equilibrium of the Maṣlāwi society. In this change, the dialect of Arabic spoken in Mosul appears to be shifting towards *gelet*.

With the above in mind, the study has also attempted to put this change in Mosul within the wider context of Iraqi Arabic, particularly the *qeltu* group. Other *qeltu*-speaking dialects were also shown to be undergoing change under rather similar conditions to those of Mosul. In this regard, the study has reconstructed three waves of Bedouinisation that have shaped the linguistic portrait of Iraqi Arabic dialect groups. These waves have all involved rather analogous causes and outcomes. The study has discussed the causes and outcome of the past two waves noting the parallelism between them and the current third wave, which is targeting Mosul and other *qeltu* areas. In this regard, the study has presented evidence from this study for the case of Mosul supported by evidence from the literature for the other *qeltu*-speaking areas.

The study has also brought koineisation into the discussion as a very likely process to be

underway in the dialect. This discussion has been informed by the main consequences of previous Bedouinisation waves and what we can see in the speech of Mosul at present. While the position taken as regards this phenomenon is more of a preparation than a confirmation, the study has however discussed that the previous waves of Bedouinisation resulted in a *gelet*-dominated koine in the south of Iraq and then Baghdad. The study has also shown how a process of koineisation is perhaps currently underway in Mosul and that what is going on in MA could be interpreted as an initial stage of this process. This process is expected given the contact between Mosul's *qeltu*-speaking people and the *gelet*-speaking migrated groups with competing speech forms coexist in the city. This was also informed by commentaries from non-Maṣlāwi residents that their speech is becoming more like a hybrid of features from both *qeltu* and *gelet*. The study has thus laid foundations of what could be a fertile area of research as the speech of non-Maṣlāwi communities needs to be taken into account. Future directions of research on this and other points are given below.

12.2 Contribution of the study

This study hopes to have made contributions in several respects. The study has shown that there is more to the variation of the phonological variables it assessed than what is described in the literature. Evidence has been presented in the form of offering some fresh aspects of the structural as well as the social patterning of these variables. The study has demonstrated a relaxation of previous conditions assumed to be affecting the occurrence of certain forms in MA. Notably, it has demonstrated that the traditional forms of these variables are across-the-board in the dialect. These findings crucially inform the phonology of one of the main dialect groups in Iraq. This is also important in not only making statements about the variables of interest but also in continuing future research on the dialect in general. It is also instrumental in reinterpreting statements of previous research that presupposed a theoretical bias in which certain linguistic units are granted an unfounded influence on the distribution of certain realisations.

The study has also delineated the socially influenced variability and change in MA. Much of this variation has been either previously unaddressed or subject to little information drawn from impressionistic observations. In the discussion of the variables investigated in this study, a number of related concepts (e.g. levelling, gender, class, social conditions of societies and movements of people) were brought to light and compared to the case of Mosul. The application of variationist methods and models to new linguistic and social settings have crucial implications for the field. It is hoped this has enhanced our understanding of these

themes, especially that the study has offered a perspective from a traditional yet inadequately explored dialect of Arabic.

This study is the first to examine the appropriation and/or abandoning of traditional phonological features by MA speakers sampled by three social attributes: age, gender and class. As such, this study has found that the production of these features is changing. It has offered evidence to support long-standing anecdotal observations about a change in the realisation of MA traditional forms. Conditions and other relevant principles of this strand of research have also been discussed. The study thus hopes to have contributed to the concept of dialect levelling by testing its principles in an interesting context of competing urban and Bedouin linguistic forms. The study has shown that the precipitating factors could be peculiar to the specific community or area of enquiry. This peculiarity stems from the contemporary and historical contexts of that community. While industrialisation and facilitated mobility are driving the linguistic change in many Western communities, urbanisation, forced movement of people and other ensuing processes (e.g. Bedouinisation) have similar social and (socio)linguistic effects on Arab societies. The study has thus contributed to our understanding of sociolinguistic variation, especially with respect to issues of levelling, contact and change.

To draw the bigger picture of its enquiry, the study has attempted to relate the contemporary situation of Mosul and other *qeltu* dialects to relevant historical antecedents in Iraqi Arabic, from linguistic and non-linguistic perspectives. This was to delineate parallel trends in the Bedouinisation and koineisation processes and the linguistic repercussions that ensued as a result. In this regard, the study hopes to have been beneficial to a deeper understanding of not only the community under scrutiny in this study but also of the wider realm of dialect formation and development of Iraq. This collectively opens up a door for further research, which will find more room in the next section.

On the methodological level, the study has utilised contemporary research tools to provide a considerable methodological update to the literature on this dialect. The study has also made modifications (section 6.6.2) to some methodological techniques such as using local-based maps rather than the traditional lost-treasure ones. This proved useful in generating longer free-style accounts of speech than just naming the objects and landmarks shown. Also, the study used pictures that are themed around the locality and these helped in obtaining insider information on the specifics of the community and its tradition. This provided a better understanding of the community in addition to producing the tokens of interest intended from

this task. These steps could help enhance the functionality of these techniques for this type of projects.

12.3 Limitations and further research

There are areas where improvements could be made in this study. In the previous chapters, we have seen that the situation of Maṣlāwi Arabic and its implications on the wider context of *qeltu* is such a sprawling topic. The study should in no way be taken as the final word on the themes or questions raised although it has presented a number of important findings. In light of what has been described in this study, there is sufficient rationale to expand the frontiers of research and discussion to capture more issues of variation and change, particularly in the phonology of Iraqi Arabic. Incorporating new constraints and research questions may not only consolidate what has been presented in this study but also help in bridging the research gaps in the area. Investigating more potential features (a number of them sketched in chapter 4) such as affrication would further enhance our understanding of the phonological system of MA as this study has shown that the past literature presents no comprehensive treatment of this system and thus this area remains in need of further research.

Also not dealt with yet is an investigation to see if more phonological features are changing over time as this would complement the change trajectory of the system of MA. This study has sought to bring to the fore what could be considered a fresh line of inquiry in this regard and thus further research could be more illuminating. This is more so given the area remains a rich linguistic area with relatively no equal corresponding linguistic inquiry.

Another interesting area to deal with in future research is the aftermath of the fall of Mosul in 2014. This resulted in the destruction of substantial parts of the city and the exodus of Mosul's residents to other areas of Iraq and abroad. The contact between Maṣlāwis and the people of the recipient communities, e.g. Kurds and *gelet* speakers, would provide an interesting area of further research along similar lines discussed in this study. Although developments (such as a change) in linguistic systems are not always predictable, the immensity of these events may have its own effect on the speech forms of Maṣlāwis. As has been discussed earlier, the sociopolitical forces that have operated in Mosul and elsewhere have, in the long run, resulted in changes in the linguistic systems therein. Therefore, if these are anything to go, we would expect at least some signs of (socio)linguistic ramifications. Future research could perhaps provide initial observations on the expected linguistic effects of the aforementioned developments.

Although this study was carried out in Mosul, it has nevertheless demonstrated a more complex picture involving other *qeltu* dialects that are undergoing a process of change with parallel social conditions and linguistic outcomes to those of Mosul. This opens the door for more research towards a bigger picture of this dialect group. This could include other *qeltu* towns such as Tikrit, ʿĀna, Kirkuk, which are undergoing similar conditions. Investigations of the changing state of affairs in the dialects spoken there may illuminate and perhaps be illuminated by the current study to reach more generalisations. Investigating issue like Bedouinisation and its effects on the linguistic situation in those areas is also a promising line of enquiry.

The study has shown that given past and contemporary considerations, it is likely that a process of koineisation to be in operation. For this to be fully accounted for, the speech of non-*qhāh*/*qīqu* residents of Mosul (being the obverse of the coin) needs to be examined. Conducting a study with a comparative sample of both Maṣlāwi and non-Maṣlāwi residents of the city of Mosul would be an interesting topic to explore. This process can also be probed in other areas that have seen similar conditions (e.g. immigration, contact and social change) as discussed earlier. Through its survey of the *gelet* dialect in 3.1.1 above, this study has also identified some gaps in the literature on this dialect group. These can also be approached, particularly given the existing studies have reported some interesting changes in those *gelet* dialects (e.g. Basra).

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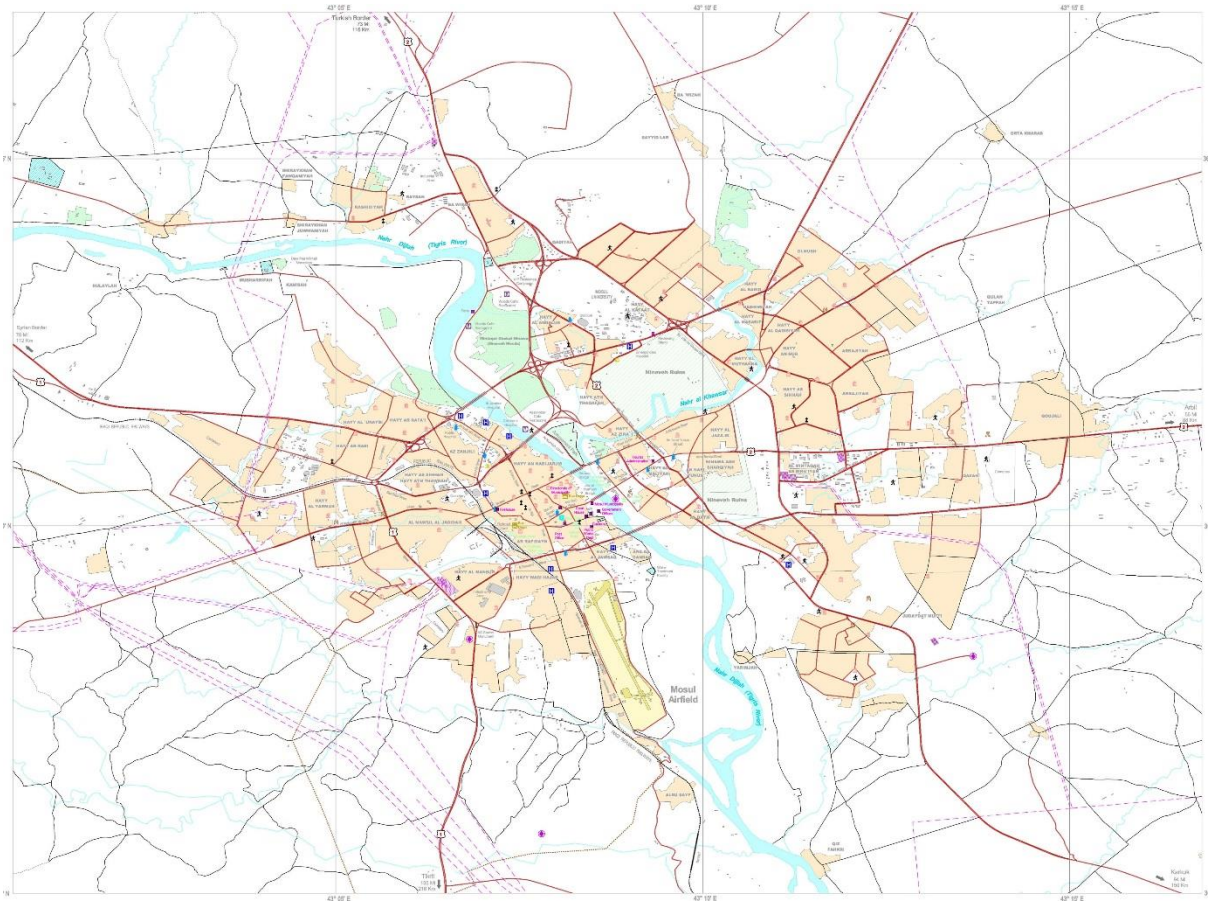
Appendices

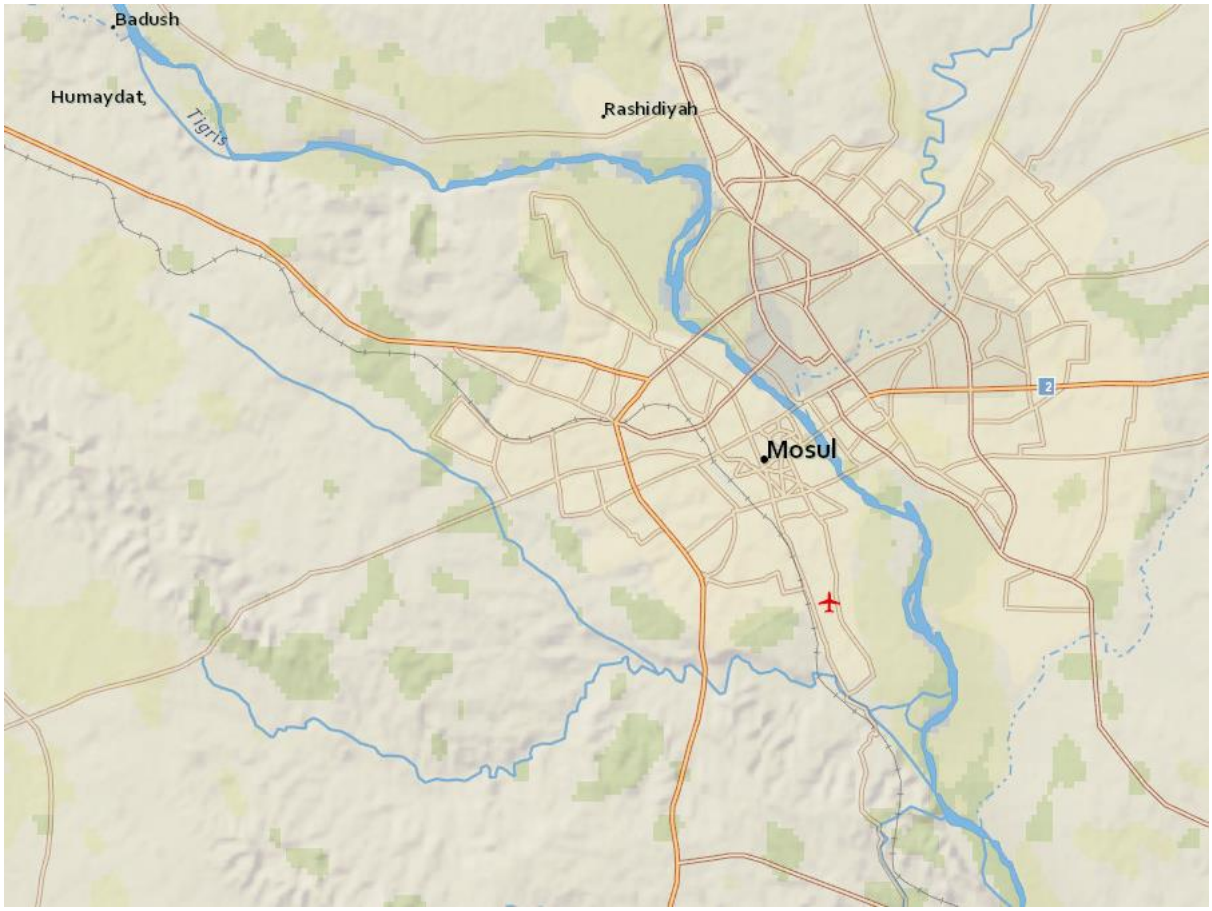
Appendix A

Maps used in the map task method during data collection.



Map 7: Map of the city of Mosul.[176]

[176] Source: http://www.lib.utexas.edu/maps/iraq.html



Map 8: Map of Mosul.[177]

[177] Source: http://mapmaker.nationalgeographic.org/

Appendix B

Participant Consent Form

Consent Form for participating in a PhD research project.

I, the undersigned, confirm that (please tick box as appropriate):

1.	I have read and understood the information about the project, as provided in the Information Sheet dated _____.	☐
2.	I have been given the opportunity to ask questions about the project and my participation.	☐
3.	I voluntarily agree to participate in the project.	☐
4.	I understand I can withdraw at any time without giving reasons and that I will not be penalised for withdrawing nor will I be questioned on why I have withdrawn.	☐
5.	The procedures regarding confidentiality have been clearly explained (e.g. use of names, pseudonyms, anonymisation of data, etc.) to me.	☐
6.	I understand that this project will involve the observation of my speech behaviour and will involve its taperecording or transcription.	☐
7.	Select only **one** of the following: • I would like my name used and understand what I have said or written as part of this study will be used in reports, publications and other research outputs so that anything I have contributed to this project can be recognised. • I do not want my name used in this project.	☐ ☐
8.	I, along with the Researcher, agree to sign and date this informed consent form.	☐

Participant:

_____ _____ _____
Name of Participant Signature Date
Researcher:
_____ _____ _____
Name of Researcher Signature Date

Table 25: The participant consent form used in this study.

Appendix C

Picture Samples