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Arabic in Transition:
Contact-Induced Language Change within the Iraqi and Syrian Diaspora in Germany

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Für meine Eltern

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Abstract

Large-scale migrations often lead to new language contact situations, resulting in long-term effects such as new dialect formation and specific language behaviors like code-switching. Since the refugee crisis began in 2015, Germany has seen a significant influx of refugees from Syria and Iraq due to political turmoil. Syrians and Iraqis have been among the top nationalities seeking asylum, particularly in Bavaria and North Rhine-Westphalia. These displaced individuals bring their own dialects to Germany, where they acquire German as a second language and also encounter other Arabic dialects spoken by migrants from different backgrounds. As a result, unique language contact scenarios emerge. This situation offers rich opportunities for sociolinguistic research, especially as Iraqi and Syrian speech communities remain significantly under-studied. This dissertation presents a variationist study based on 20 sociolinguistic interviews and two group interviews with speakers from Damascus and Baghdad residing in Bayreuth and Nuremberg since 2014/2015. The data were analysed using mixed-effects modeling, focusing on eight high-frequency linguistic variables – three lexical, one morpho-syntactic, two phonological, and two morphological. The study addresses two main research questions. The first concerns intergenerational differences within each of the two groups. The second examines whether a common koine is emerging between Syrian and Iraqi speakers as a result of language contact. The case study finds no evidence of normative or standardized koineization. Rather, the ind ividual interviews show both variation and strong adherence to established dialect norms. However, pre-koineization tendencies emerge more clearly in the group data. On the one hand, the results reveal intergenerational linguistic differences: younger speakers use more German vocabulary, while older speakers use religious expressions more frequently. On the other hand, convergence appears on both sides: Iraqi speakers reduce typical Iraqi features such as [č] (palatalized /k/), *da-* (pragmatic imperfect marker), and *wiyya* ('with'), while Syrian speakers increase their use of [h] in pronominal suffixes (as in Iraqi Arabic). At the same time, divergence is observed as Syrians increase their use of the marker *ʕam-* (immediate present).

Keywords: *Arabic Diaspora, Dialect Contact, Migration Linguistics, Iraqi Arabic, Syrian Arabic, Variationist Analysis*

List of Abbreviations

1	first person
2	second person
3	third person
F	feminine
M	masculine
SG	singular
PL	plural
O	old
Y	young
I	Iraqi
S	Syrian
PERF	Perfect
IMP	Imperfect
SA	Standard Arabic
QA	Colloquial Arabic
ESA	Educated Spoken Arabic
CA	Cairene Arabic
UEA	Upper Egyptian Arabic
CS	Code-Switching
GLMM	Generalized Linear Mixed Model

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Transcription and Symbols

The transcription used in this work largely follows the transliteration system of the *Deutsche Morgenländische Gesellschaft* (DMG). The transcription of sounds is generally presented using the *International Phonetic Alphabet* (IPA) symbols[1]. Other symbols used and their IPA equivalents are as follows:

Symbol	**IPA**
aa	aː
ee	eː
ii	iː
oo	oː
uu	uː
j	ʤ
ž	ʒ
ḥ	ħ
š	ʃ
ṣ	sˤ
ḍ	dˤ
ṭ	tˤ
ẓ	ðˤ
ġ	ɣ
č	ʧ
g	ɡ
y	j

[1] See www.internationalphoneticassociation.org/sites/default/files/IPA_Kiel_2015.pdf [June 2024].

Chapter 1: Introduction

Over the past fifty years, the Arabic-speaking world has experienced substantial migration, primarily characterized by rural-urban and urban-urban shifts due to economic and political reasons. This period was sometimes accompanied by significant upheavals, this period seeing drastic social and demographic shifts. This large-scale migration has also resulted in heterogeneous contact situations among various Arabic dialects (Lucas, Manfredi 2020, p. 1). The past decade has been marked by political turmoil and armed conflicts in the Eastern Mediterranean region that lead to the largest refugee population globally (UNHCR 2024). Consequently, many refugees have undertaken perilous journeys to Europe (Sirin and Rogers-Sirin 2015). Notably, in the summer of 2015, Germany recorded the highest number of asylum applicants ever (Crul et al. 2017). Germany now hosts more than one million refugees (UNHCR 2024). Reports by the *German Federal Office for Migration and Refugees* indicate that in 2017 and 2018, 35% of asylum seekers were children and adolescents, with a significant number coming from Syria and Iraq (see BAMF reports 2016 – 2023). These people face the dual challenge of adapting to a new country while managing developmental tasks such as forging relationships and forming their sense of self (Jugert and Titzmann 2020).

Migration from Arab regions to Western countries began in the late nineteenth century, with early migrants from Greater Syria primarily settling in the United States and Latin America. These initial migrants were mostly Christian laborers with limited formal education. In the period following World War II, individuals with higher educational backgrounds – particularly from Lebanon, Palestine, Yemen, and Iraq – began to migrate as well. Ongoing political instability in these regions during the 1970s and 1980s led to a continued rise in emigration (Rouchdy 1992, pp. 17–18).

In both the US (Daher 1992, p. 29) and Europe (Ruiter and Boumans 2002, p. 282), Arabic diasporic communities are undergoing rapid language shifts, in some cases even leading to language loss. These contact-induced changes in diasporic communities often mirror, at an accelerated rate, the changes occurring in their homeland languages. Such internally motivated changes in diasporic varieties highlight the importance of studying language change within migrant languages (D'Anna 2020; Rouchdy 1992). Migration to Western Europe from Arabic-speaking countries intensified following the decolonization process of the 1960s, predominantly involving speakers from North Africa. By 1995,

established Arab communities were present in Germany, Italy, France, Belgium, and the Netherlands (Ruiter and Boumans 2002, pp. 259–260).

Migration serves as a significant catalyst for linguistic contact and variation, influenced by factors like forced displacement, economic motives, and cultural dynamics. Research over the past forty years has shown that migration-induced dialectal contact leads to diverse linguistic outcomes, driven by both long-term processes and short-term accommodation (Britain and Trudgill 1999; Siegel 1985). Today, migration and its accompanying multilingualism generate various linguistic phenomena, key to studying language contact, change, and multilingualism. These include code-switching, code-mixing, the emergence of ethnolects, language attrition or loss, and various forms of linguistic transfer. Specifically, in the context of migration-induced contact involving Arabic, several general patterns have been observed across different settings**.** Assimilation to the dialect of the host city, for instance is illustrated in Miller's (2005) study, documenting how Upper Egyptian migrants in Cairo, Egypt, adopted the dialect of the host city. In contrast, as found by Al-Wer (2002) in Amman, Jordan, the development of a koine can mark the end product of language change. Yet another outcome, observed by Hachimi (2007) in Casablanca, Morocco, involves migrant groups maintaining certain features of their original language varieties.

1.1 Research Motivation

As Arabic speaker groups, Iraqis and Syrians living in Germany as a result of the refugee crisis that began in 2015 have not yet attracted scholarly attention in sociolinguistics. These are populations that have been displaced from their home countries into new sociolinguistic environments. Germany, with a long history of migration, remains one of the largest immigrant-receiving countries in Europe. Since the refugee crisis, significant numbers of refugees, displaced persons, and other migrants from the Middle East, particularly Iraq and Syria, have arrived in the European Union. The reasons for these migrations are varied but largely stem from fear of violent conflicts and political turmoil. According to the *Federal Office for Migration and Refugees* (BAMF), hundreds of thousands of asylum applications were filed in Germany from 2015 to 2023, with Syria and Iraq being the most represented countries of origin during these years.

Currently, North Rhine-Westphalia and Bavaria are the federal states with the highest number of asylum applications (see BAMF reports 2016-2023). However, Arabic-speaking migrants from different countries have not only come into contact with the German language in this context, but also with other Arabic varieties to which they would in all probability never have been exposed in their home countries.

This research, conducted as part of the DFG-funded project *Modernity, Migration, and Minorities: Three Case Studies on Arabic in Contact Situations*[2] integrates the increasingly relevant role of migration in the field of language contact and change. In this case study on Arabic in Germany, Arabic is spoken as a minority language. The resulting consequences for linguistic practice are the subject of the project, which provides a unique perspective in sociolinguistic research. Specifically, the study aims to better understand the many factors influencing the dynamics of oral Arabic in today's world. Moreover, this research is among the first to specifically explore the mass migration communities from the Middle East to Germany, a significant and understudied demographic shift.

The doctoral project on Arabic in Germany builds on the tradition of research in the field of migrant languages within the country. Historically, significant efforts have been focused on languages like German, as seen in studies such as the Heidelberger Forschungsprojekt "Pidgin-Deutsch" (1975) and the Wuppertal ZISA project (Clahsen et al. 1983). These studies have typically explored how immigrant populations acquire and adapt to the German language over time. An example is the study by Şimşek and Schroeder (2011), which focused on the language use of the younger generation of Turkish speakers in Germany, particularly the Turkish variant, which has now been in contact with the German language for more than 50 years. Building on this foundation, this research extends the exploration to Arabic by examining the outcomes of language contact and the changes it brings about in a new linguistic environment. The circumstances of Arabic-speaking migrants are particularly distinct, often marked by their status as refugees and intermittent connections with their homelands. These factors profoundly influence their language practices compared to more established migrant communities, such as Turkish speakers, who benefit from strong diasporic ties.

[2] The project examines the sociolinguistic dynamics of Arabic in varying contexts through three case studies by employing classic comparative sociolinguistic methods based on oral corpora. The first two case studies focus on displaced populations. Similar to the Iraqis and Syrians in my case study, Nigerian Arabs displaced by the Boko Haram insurgency since 2011, now residing in refugee camps in Maiduguri, NE Nigeria, represent another focus of linguistic study (Prof. Dr. Jonathan Owens) due to their forced migration. The third case study (Prof. Dr. Valentina Serreli) shifts to the Siwa Oasis in Egypt, where the influx of Egyptian non-native residents coming from other parts of Egypt since the 1980s has altered the linguistic landscape.

1.2 Aim of the Research

This dissertation aims to address a significant gap in sociolinguistics, focusing on the understudied and underrepresented Iraqi and Syrian speech communities in Germany. These communities, formed in response to the refugee crisis beginning in 2015, offer a unique linguistic context that has seldom been explored in depth. Displaced by conflict, these groups provide a rich landscape for examining how forced migration affects language use and identity formation within diaspora settings. The substantial influx of refugees from Syria and Iraq to Germany presents both a humanitarian challenge and a critical area for sociolinguistic research. Investigating these communities' linguistic interactions is essential to understanding how migration influences language practices, changes, and the emergence of new linguistic phenomena in host countries.

Additionally, the diversity of Arabic varieties spoken by these communities introduces a complex layer of linguistic interaction. In Germany, Arabic speakers not only adapt to the German language but also engage across different Arabic dialects, creating a unique sociolinguistic environment where Arabic is practiced as a minority language. This setting provides an opportunity to study the implications of dialect contact, including the development of new linguistic forms and the potential for language shift.

Through this dissertation, I aim to enhance our understanding of how migration shapes oral Arabic, exploring the diverse factors that influence its dynamics in a global context. The study offers insights into the broader sociolinguistic effects of migration and underscores the adaptive strategies of migrant communities in maintaining and transforming their linguistic heritage in a new homeland.

The research explores the sociolinguistic impacts of migration, with a specific focus on the Iraqi and Syrian speech communities that have resided in Germany since 2014/2015. The main focus of the study is on the emerging spoken varieties of Syrian (Damascus) and Iraqi (Baghdad) native speakers. It investigates how social factors such as age and conversational context significantly influence linguistic communication within both ingroup and outgroup interactions. Notably, the intensity and duration of contact, along with the majority or minority status of the language varieties and the relative prestige attributed to them, are key factors that facilitate, but do not solely determine, convergent changes in language (Thomason 2010, p. 33). Relevant to this investigation, as discussed in 2.2.1, is the *Communication Accommodation Theory* (CAT), which describes how individuals adjust their speech to either converge or diverge from their interlocutors' patterns

to facilitate communication or maintain social distance (Bechert and Wildgen 1991). This theoretical framework will be instrumental in examining how language variation and contact-induced linguistic changes occur among these communities. CAT distinguishes three primary adaptive strategies – convergence, divergence, and maintenance – that illuminate the mechanisms behind linguistic adaptation or resistance among speakers, which could potentially lead to new dialect forms or even a stable mixed language variety, known as a *koine* (Siegel 1985).

Accompanying CAT is the question of whether accommodation leads to language change. In this context I use a comparative framework to analyse how specific linguistic features vary between two generations to observe patterns of language variation and change over time. This method, known as the "apparent-time" approach, helps identify whether younger speakers are diverging from older ones and thus driving linguistic change, as discussed by Bailey (2004). By including multiple extralinguistic factors like age and conversational context in the analysis, we can better understand how these variations and changes are socially embedded and what might motivate these linguistic shifts, whether toward convergence or divergence. An essential part of this investigation is the coding for speaker age, which enables a direct comparison of the language use among younger versus older Iraqi and Syrian speakers. This comparison helps us assess if and how linguistic changes are emerging across generations. Additionally, established grammars of the language varieties in question, such as those by Erwin (2004) and Cowell (2005), provide a baseline against which to measure these changes. This approach not only pinpoints where changes are occurring but also highlights which group – either the younger or older generation – is leading these changes. The study centers around two main research questions that will be described in the following.

RQ1: Is there intergenerational language variation within Iraqi and Syrian communities in Germany, and if so, what independent variables (such as age, gender, and conversational context) characterize this variation?

The primary objective of this research component is to explore the intergenerational linguistic differences within the Iraqi and Syrian communities residing in Germany. Here, the groups are split into two age groups: 18-26 years and 45-56 years. The study uses sociolinguistic interviews as a fundamental tool for capturing natural language usage, which is particularly effective for examining sociolinguistic variation (Milroy and Gordon 2003, p. 57). These one-on-one conversations with Iraqi and Syrian individuals are

designed to elicit “natural” speech patterns, allowing for an authentic exploration of linguistic behaviors across different generations (Tagliamonte 2006, p. 38). The research specifically targets high-frequency linguistic variables that are hypothesized to be correlated with age. These variables are selected as key independent factors to discern patterns of linguistic maintenance or shift. Additionally, gender is included as an independent variable to examine if there are distinct linguistic patterns or trends that differ between male and female speakers within these age groups.

It is anticipated that older participants within these groups will display a higher tendency to adhere to their ancestral linguistic varieties, reflecting a conservative linguistic stance. On the other hand, younger speakers, who are more exposed to and influenced by German, are expected to exhibit significant linguistic shifts towards German, leading to potential language attrition. This hypothesis is tested by comparing the linguistic behaviors of older speakers with those of younger speakers. The analysis will focus on how these intergenerational differences manifest themselves within communal and individual linguistic practices.

This research module explores language change across generations within the Iraqi and Syrian communities in Germany, employing the “apparent time” method. This methodological approach is predicated on the assumption that age-related linguistic variations among speakers reflect historical changes, thereby facilitating the analysis of language evolution without the need for longitudinal studies. By analysing different age groups at a specific point in time, this method leverages the idea that “differences across generations of speakers at a given point in time will mirror actual diachronic change” (Wolfram 2006, p. 338). This allows for an exploration of how linguistic features shift or stabilize over time within these communities. An essential component involves comparing contemporary spoken data with established written grammars, especially when specific corpus data are missing. This comparison helps identify deviations from traditional norms, such as lexical borrowing and syntactic convergence, which are indicative of language change due to contact.

Language change is generally a long-term, intergenerational process influenced by immediate linguistic adaptations to the environment (e.g. Kerswill 2004). To robustly capture these dynamics, the study compiles a comprehensive corpus that includes both linguistic data and contextual information from the communities. The corpus will facilitate the identification of long-term linguistic trends and how different generations navigate the complexities of maintaining their linguistic identity in a new linguistic landscape. As a

conceptual measurement tracing the cross generation evolution of Arabic among the group sample, a second major research question asks about the development of a koine.

RQ2: To what extent is a common koine forming between Iraqi and Syrian Arabic-speaking groups in Germany?

To help answer this question, experimental data was generated from group conversations with both Iraqis and Syrians present. These sessions provide a dynamic setting to observe the linguistic interplay when members of both Iraqi and Syrian groups coexist in a shared diasporic space. Group interviews offer insights into how linguistic norms and practices are negotiated among speakers from different generations and backgrounds, highlighting potential areas of linguistic convergence or divergence. The accommodation model presented by Giles (1973) is based on the socio-psychological insight that individuals adapt to one another in order to achieve a positive evaluation from the other (Bechert and Wildgen 1991, p. 62). This may result in language characteristics that did not exist in either language or variety before the language contact. However, the mutual attitude of the speakers towards each other is not always geared towards adaptation or assimilation, but can also lead to the preservation of distance through clear differences. This is particularly noticeable in the avoidance of typical dialect phenomena (Giles et al. 1973).

This part of the research therefore assesses to what extent a common linguistic koine, indicating a convergence of linguistic features, emerges between Iraqi and Syrian communities in Germany. Conducted through an interaction exchange in controlled mixed-group conversations with both Iraqi and Syrian participants, the investigation explores if and to what extend these groups accommodate each other's linguistic features within a shared diasporic space. The goal is to determine if the patterns of linguistic accommodation observed in mixed-group settings align with those seen in individual interviews, and whether a certain setting – such as group versus individual contexts – affect the usage of specific linguistic features.

It is hypothesized that linguistic accommodation between Iraqi and Syrian speakers in group interviews is influenced by various social and linguistic factors, leading to differential adoption or avoidance of linguistic features across these groups. This study seeks to understand if the direction and degree of accommodation vary depending on the interaction context (one-on-one versus conversations). This part of the study will examine the linguistic dynamics within these mixed groups to identify any patterns of convergence or divergence between the speech communities.

This study investigates the impact of prolonged residence in a non-Arabic speaking environment, such as Germany, on the linguistic practices of Iraqi and Syrian communities. It aims to uncover how living in such an environment for an extended period (such as five years) influences their language use and adaptation strategies. The following figure summarizes the contact situation between the different languages and varieties:

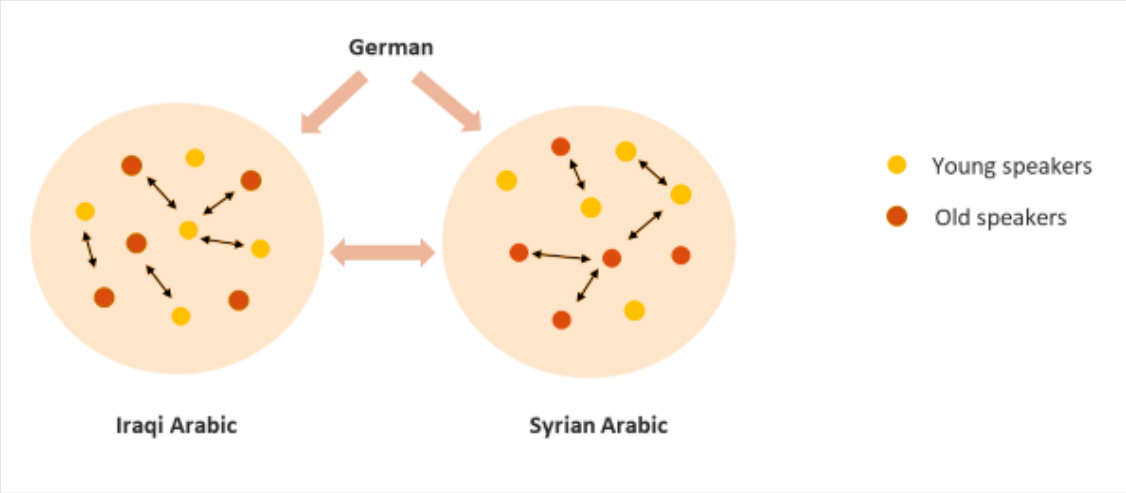


Figure 1. *Overview of the Contact Situation Among Iraqi and Syrian Speakers in Germany*[3]

The foundation of this study is built on sociolinguistic interviews conducted in Bayreuth and Nuremberg. Additionally, two mixed group conversations were recorded with the same speakers. These sessions brought together Iraqi and Syrian speakers, with four from each group. The interviewees include speakers from two generations, aged 18-26 and 45-56, from both Iraq and Syria (see 5.2.2). Finally, another focal point of this thesis concerns the methodology of the study. By elaborating on how the data was collected, processed, and analysed, this study aims to inspire researchers in Arabic linguistics, particularly those working with variationist approaches, to engage more extensively in quantitative analysis.

[3] While this study primarily focuses on the interaction between Iraqi, Syrian, and German languages, it is important to recognize that the participants are probably exposed to other languages, Standard Arabic and various other Arabic dialects spoken by different migrant groups in their communities, as well as Bavarian/Franconian dialects prevalent in Bayreuth and Nuremberg. This indicates a richer language diversity than represented in the figure. However, the languages discussed are the most dominant and prevalent in the participants' environments.

1.3 Structure of the Thesis

This thesis is organized in seven main chapters, each designed to explore different aspects of Arabic language variation and contact among migrants in Germany, Chapter 2 discusses the broader phenomena of language and dialect contact in the context of migration. It explores language prestige, attitudes towards different dialects, and the sociolinguistic outcomes of migration-induced language contact, including theories and concepts. Subsequent chapters focus on specific details about Arabic. Chapter 3 examines how Arabic dialects interact within diverse sociolinguistic environments by discussing the prestige associated with different Arabic dialects and the effects of contact between them, as well as the nature of Arabic in diasporic contexts. Chapter 4 provides an in-depth look at the linguistic features of Iraqi and Syrian Arabic, setting a foundation for understanding the empirical findings discussed later.

The methodology and research design are detailed in Chapter 5, describing the data collection instruments and procedures, including sociolinguistic interviews and questionnaires. It also covers ethical considerations, describes the corpus and analysis methodology, and discusses the statistical procedures used. Chapter 6 presents the quantitative findings of the study by exploring sociolinguistic variation and potential shifts among the Iraqi and Syrian communities in Germany. It focuses on selected linguistic features, concluding with a discussion the generational language shifts observed and their potential relevance to the emergence of a common koine among these communities. The thesis concludes with Chapter 7, a summary of the key findings and a comprehensive discussion that provides the insights gained from the study and a deeper understanding of language maintenance, shift, and variation in the context of migration. The chapter also acknowledges the study's limitations and outlines directions for future research.

Chapter 2: Language and Migration

Language change is typically shaped by a combination of factors, including intralinguistic dynamics within the language system, external influences due to language contact, and the broader context set by extralinguistic forces such as socio-political and economic conditions (Farrar, Jones 2002, p. 1). Extralinguistic factors shape the conditions under which language may shift due to contact – specially in migration contexts – or continue developing along its own trajectory. Migration profoundly influences the social dynamics of all groups involved: the sending society, the receiving society, and the migrants themselves (Lewis 2021, p. 25). Therefore, migration provides the setting that often favors contact-induced language changes. Such changes are common in many migration contexts, except when a homogenous group relocates to an isolated area, thereby limiting language or dialect contact (Thomason and Kaufman 1988; Trudgill 1986).[4] In this way, the extralinguistic environment either acts as a catalyst for language contact and subsequent change, or it provides a stable setting in which language can undergo its own internal evolution. Variation and change, reflecting the inherent variability of language influenced by linguistic, social, and situational factors, and its tendency to evolve over time is a central concern for sociolinguists.

In its initial section, this chapter provides an overview of language and dialect contact, focusing on how prestige and language attitudes influence linguistic behavior. The latter part of the chapter will discuss the potential outcomes of migration-induced language and dialect contact. This sets the stage for an in-depth exploration of sociolinguistic perspectives on Arabic in contact, which will be the focus of the subsequent chapter.

2.1 Language and Dialect Contact

When communities speaking mutually comprehensible dialects come into long-term contact, their dialects may become more alike. This convergence is often ascribed to linguistic accommodation (see 2.2.1), a phenomenon observed during face-to-face interactions

[4] For instance, Owens (1998) describes how Arabic speakers in Maiduguri, when interacting with outsiders, may shift towards perceived, often heterogeneous, exogenous norms. This adaptation aligns with the dominance model, showing a tendency to adopt more widely recognized linguistic forms in mixed social settings. However, within their own community settings, the same individuals largely maintain an inherited ancestral variety. This dual linguistic strategy underscores the co-existence of a koine and local norms within their language repertoires, distributed according to complementary contexts (see also Trudgill 1986).

(Giles 1973; Giles and Smith 1979). Extensive research in this field focuses on the consequences of dialect contact, particularly when migration, whether occurring as large-scale movements over a defined period or as gradual movement over time, creates the conditions for dialectal interaction. The dynamics of these migrations usually result in language and dialect contact. This underscores the importance of understanding the different variants that emerge from such encounters. To understand this phenomenon more deeply, Auer (2021, p. 147) provides insights:

> "Language contact is usually seen as a result of social factors enabling, encouraging or forcing speakers of different languages to communicate with each other. The type and amount of linguistic contact appears to be conditioned by these social factors (cultural, political, or economic superiority and power, etc.), as well as the concomitant language ideologies. In addition, grammatical parameters (the linguistic resources available to the speakers, the amount of structural overlap between the grammars and vocabularies, the amount of variation within the languages, etc.) have been shown to impact on the quantity and quality of language contact."

This area of research often focuses on the linguistic implications of population migration, whether it involves large groups relocating in a specific time frame or a continuous influx over an extended period, both of which create opportunities for dialect contact. Trudgill (1986) influential book *Dialects in Contact* not only spurred research into the linguistic outcomes of significant dialect contact, such as those resulting from colonial migrations, but it also prompted a reevaluation and reinterpretation of dialect change in the context of speaker mobility. Trudgill posited that sustained linguistic accommodation between speakers of different dialects, typical in scenarios of colonialism, urbanization, and migration, can lead to the permanent integration of accommodated forms into the speakers' dialects. As we transition from the broader concept of language and dialect contact, the next two subsections discuss the role of prestige and language attitudes that play an essential role in the study of language and dialect contact. Notably, these topics will also be further examined in Section 2.1.2 in a more general way and in 3.2 focusing specifically on Arabic.

2.1.1 Language and Prestige

Language and prestige link in complex ways, shaping social dynamics and perceptions within a linguistic community. The association of prestige with a particular language variety, be it a standard form or a dialect, influences individuals' linguistic choices, social interactions, and even perceptions of identity. In many linguistic communities, a standard variety is often deemed prestigious due to its historical, literary, or official significance. However, in diverse linguistic landscapes, especially those characterized by multilingualism and diglossia, the prestige hierarchy may differ. Dialectal forms, reflecting local identity and cultural subtleties, can also hold considerable prestige. Understanding language prestige is crucial for unraveling broader sociolinguistic phenomena. The complexity of prestige as a sociolinguistic factor within a language community is closely connected with the complex nature of the respective social structure. When examining language contact and its impact on linguistic change, a compelling question arises: does the prestige associated with a contact language influence the trajectory of change in the recipient language, and if so, in what manner? Unlike studies of contemporary spoken English, where covert prestige is shown to influence the linguistic behavior of specific groups of speakers under particular social circumstances, investigations into earlier stages of a language primarily focus on evaluating the effects of overt prestige associated with a contact language on the recipient language (Campbell and Mixco 2007). This might suggest a parallel in the dynamics of prestige between diverse linguistic contexts.

It is well-documented that prestige as a factor in language change extends beyond lexical changes, encompassing structural modifications such as shifts in pronunciation styles and alterations in syntactic and pragmatic choices. The concept of prestige has been discussed in early studies on engage contact (such as Weinreich et al. 1968). Nevertheless, it is essential to acknowledge the substantial challenges posed to this notion by (Milroy 1989), who critically examines the commonplace and somewhat vague application of prestige as an explanatory factor for linguistic change, often leaving its actual explanatory power unclear.

Hickey (2010, pp. 7–8) discusses two widely recognized terms employed to distinguish between languages with varying levels of prestige: 'substrate' and 'superstrate'. The 'superstrate' typically enjoys, or has historically enjoyed, a higher status within the society where it is spoken. This status discrepancy, often driven by asymmetrical power dynamics in contact situations, significantly influences the outcomes of linguistic contact. Exploring

the concept further, Hickey argues that the language with greater prestige typically exerts a more substantial influence on the language with lower prestige. This influence is most evident in the lexicon, which functions as the main entry point for borrowings from the superstrate due to its open-class nature and the high level of speaker awareness it attracts. A more detailed examination of prestige within Arabic dialects is provided in sections 3.1 and 3.2, which provide insights into the factors contributing to the perception of prestige in specific Arabic dialects. Prestige depends on the status assigned to the different languages, which in turn depends on the speakers' attitudes towards them, as we shall discuss in the next section.

2.1.2 Language Attitudes

The investigation of language attitudes allows to shed light on aspects such as speaker's opinion, feelings of loyalty towards a language or language variety as well as language prestige (Obiols 2002). According to Wolfram and Schilling-Estes (2007), speakers frequently regard certain languages or language varieties as more prestigious than others. Such evaluations – shaped by individuals or their speech styles – form the basis of language attitudes and linguistic stereotyping. Consequently, if a particular linguistic feature in speech or writing is perceived as 'correct,' the speaker is likely to regard the language user more highly. Conversely, features that are perceived as 'incorrect' may result in negative judgments about the speaker. The use of a particular language, variety, dialect, or accent conveys social information and plays a central role in shaping perceptions and forming stereotypes[5] about individuals (Dragojevic et al. 2013; Garrett 2010; Lambert 1967). A speaker's accent, vocabulary, speech patterns and intonation can play a decisive role in the evaluation of a listener regarding personality, social status, character and other aspects (Ryan and Giles 1982). Language attitudes determine our choice of a certain language to communicate with others. Therefore, the chosen language is generally the one that is preferred and seen as appropriate depending on the context (Labov 1972a). Parents and teachers, as well as the peer group, play an important role in the development of an

[5] In the literature, ttereotypes are mostly defined as the association between a group or groups and the characteristics attributed to them (e.g. Ashmore et al. 1981).

individual's attitudes, because attitudes are learned through socialization by observing people's behavior and its consequences Garrett (2010, pp. 22–23). In everyday life, these attitudes pass through our social and personal lives and are kept latent or expressed overtly.

Language attitudes manifest either explicitly or implicitly across three primary domains: affect (emotions), cognition (beliefs and thoughts), and behavior (inclination to act) (Baker 1992; Ryan and Giles 1982). Each of these domains represents causes of attitude and domains of expression; thus, they do not represent attitude itself. The *affective* domain makes itself present in feelings about a certain language. It represents an individual's emotional reaction to speakers of a language. In the cognitive domain, attitudes relate to what people understand or assume about a language and those who speak it. From a behavioral perspective, attitudes are seen as patterns of action that individuals display toward the subject of their evaluation (Zimbardo et al. 1977).

Investigations into language attitudes as a significant factor behind language change continue to be a thriving area of exploration within sociolinguistics. This field has extensively borrowed from social-psychological theories and frameworks to develop approaches for understanding interpersonal communication and group boundaries. In contexts of language contact, subjective ethnolinguistic vitality is commonly used to assess language attitudes. According to the framework developed by Giles et al. (1973) and Giles and Smith (1979), speakers who place high value on their own language often adopt strategies that highlight distinctive linguistic traits and ethnic markers during interactions with members of other social groups. Conversely, when this value is less pronounced, individuals may adopt strategies geared towards assimilation or accommodation, aligning their language use more closely with the dominant group. However, as Liebkind (2010, pp. 23–24) points out, low ethnolinguistic vitality does not necessarily result in these outcomes.

The relationship between attitudes and prestige becomes more nuanced when shaped by family language practices. Parental views on language play a critical role in determining whether heritage speakers maintain their ancestral language. This is particularly evident in the context of language policies implemented within the home, which frequently dictate the trajectory of the minority language (Spolsky 2012). The erosion of the home environment as a support for preserving the minority language is frequently considered a terminal phase in language shift (Fishman 1991). It is reasonable to propose that positive attitudes held by parents toward the family's heritage language can significantly influence their children's rate of acquisition and maintenance, or conversely, a decline in fluency and a shift to a dominant language. For example, children are more likely to acquire and retain the

heritage language when parents both value it highly and use it consistently within the family setting (Gharibi and Boers 2019; regarding Iranians in New Zealand).

Positive attitudes toward ethnic identity are consistently linked to the continued use and preservation of heritage languages. (e.g. Extra and Yagmur 2010 on Turkish and Moroccan youngsters in the Netherlands). Consequently, it is unsurprising that parental attitudes towards younger learners of heritage languages have been identified as a significant predictor of enhanced performance in structured-elicitation tasks as well. For instance, Au and Oh's (2009) research on Korean as a heritage language revealed that the language spoken by parents at home, along with their attitudes towards the home language and culture (measured through ethnic pride and discussions related to ethnic history and identity), correlated with their children's later proficiency in the heritage language.

To sum up**,** assessing speakers' evaluation of various languages and language varieties plays an important role that should be considered in contact studies. Language attitudes play an important role in helping us understand how a speaker feels about a language or a language variety and therefore in highlighting the values the speaker is attaching to it. Social prestige, social appropriateness, social stereotypes, as well as group membership (gender, age, ethnicity etc.), ideologies, and the feelings of belonging to a minority or majority speech community have a great impact on people’s attitude.

2.2 Outcomes of Migration-Induced Language and Dialect Contact

In our exploration of linguistic variation, various models have emerged over the years, each offering distinct perspectives on the complex factors driving language change. These models provide valuable insights, drawing from both general linguistic principles and approaches tailored specifically to Arabic. While some have been praised for generating robust generalizations from limited data, others have proven less predictive or relevant in practice.

In the context of Arabic contact-induced variation, two central concepts stand out: language accommodation and koineization, each discussed in the following sections. Language accommodation refers to the short- or long-term adaptation of a speaker’s language to align with the linguistic norms of their interlocutors, a dynamic and central driver of linguistic change. Koineization, by contrast, is often a longer-term outcome of sustained accommodation, typically observable when the first generation of newcomers begins

modifying their speech to conform to emerging community norms. This process may involve mixing, levelling, simplification, reallocation, and others.

While not all of these theoretical outcomes are necessary to explain the patterns observed in my data – and some may not be directly reflected in the empirical findings – I nonetheless present them in the following to provide a comprehensive conceptual framework.

2.2.1 Communication Accommodation Theory (CAT)

Within the framework of *koineization*, the theory of speech accommodation from social psychology, as outlined by Siegel (1985, p. 367), provides a crucial perspective. This theory suggests that the purposeful modification of speech, encompassing both *convergence* and *divergence*, plays a fundamental role in the intricate process of *koineization*. Accommodation theory proposes that interlocutors adjust their linguistic and behavioral dimensions through *convergence* when seeking approval or showing solidarity, and *divergence* when such alignment is not desired (Torgersen and Kerswill 2004).

The *Communication Accommodation Theory* (CAT), developed by Howard Giles in the 1970s, focuses on the intricacies of how individuals adjust their communicative behavior during interaction, shaping perceptions and responses (Giles et al. 2010). This adaptive process, examined through diverse lenses such as sociolinguistics and socio-psychology, serves as a social tool, influencing impressions in varied circumstances. Individuals consciously or unconsciously align their communication with their conversation partners. At its core, CAT emphasizes the role of accommodation in facilitating interaction and regulating social distance, employing strategies like *convergence* and *divergence* (Giles and Ogay 2007). *Convergence* involves speakers adjusting their communication to appear more similar to their interlocutors, fostering a sense of solidarity and shared identity. This alignment can occur through various linguistic features, including pitch, speech rate and vocabulary, enhancing mutual understanding and positive impressions. Conversely, *divergence* entails deliberate adjustments to highlight differences and maintain distinctiveness, often used as a symbol tactic for preserving cultural identity (Bourhis and Giles 1977). According to Coupland (1984, p. 49),

> "People will attempt to converge linguistically towards the speech patterns believed to be characteristic of their recipients when they (i) desire their social approval and the perceived

> costs of so acting are proportionally lower (identity maintenance function) than the rewards anticipated; and/or (ii) desire a high level of communication efficiency (cognitive organization function)."

In a diverse linguistic environment, such as a newly settled community, the accommodation process is linked to dialect differences, influencing the persistence of linguistic variations. In one model, Trudgill's (1986) concept of *long-term accommodation* would shed light on this phenomenon by highlighting semi-permanent changes in habitual speech following exposure to diverse varieties. The cumulative impact of short-term accommodation in specific conversational interactions can contribute to linguistic shifts, potentially leading to the emergence of a new dialect (see subsequent section 2.2.2). However, it is important to note that accommodation does not always result in permanent change. Studies have shown that accommodation can be temporary and context-dependent, with speakers reverting to their original speech patterns in different settings (Coupland 1984). Long-term accommodation results from the accumulation of numerous short-term acts of accommodation in distinct conversational contexts. These linguistic changes may then be adopted by the succeeding generation, initiating the *focusing*[6] process (Le Page and Tabouret-Keller 1985).

2.2.2 Koines and Koineization

Migration can lead to the formation of new dialects through the process of *koineization*. This process leads to the emergence of new varieties of a language as a result of contact between speakers of mutually intelligible varieties. It "involves elimination of specific isoglosses between different dialects" (Palva 1982, p. 18). Generally, this phenomenon takes place in recently established communities where people have moved from various regions within a common language area for diverse reasons (Kerswill 2013). In the context of immigrant communities and about the impact of migration on language, (Gambhir 1981, p. 183) notes: "when speakers of different dialects or even languages, meet together at one geographical point, they tend to form one speech community, as a koine develops that replaces the earlier dialects".

[6] The *focusing* process in new-dialect formation involves the levelling of features from various input dialects, eventually leading to stability and the emergence of new shared linguistic norms.

Koines can be categorized into two distinct types: *regional koine* and *immigrant koine* as defined by Siegel (1985, pp. 363–364). A *regional koine* typically emerges as the prevalent language in a specific geographic area where multiple regional dialects coexist. It is shapes through interactions between these regional dialects. Although its primary usage remains within the region where these dialects are spoken, a *regional koine* can also serve as a lingua franca outside the area, facilitating communication with other linguistic groups. On the other hand, an *immigrant koine* develops within immigrant communities, particularly among the first generation born in these communities. It arises through contact between various regional dialects but in a different location, where a substantial number of speakers from different regional dialects have migrated. *Immigrant koines* often assume the role of the primary language within these immigrant communities and, with time, may supplant the contributing dialects.

Koineization involves the process of mixing elements from different dialects, followed by levelling (see Section 2.2.4), a phenomenon in which universally marked or language-specific elements disappear (Trudgill 1986, p. 143). This process often results in a reduction of linguistic variability within the same linguistic element, whether it be a phonological variable, a grammatical morpheme, or a lexical item. Koines, as highlighted by Siegel (1985, pp. 375–376), are characterized by the mixing of features from contributing varieties, typically exhibiting reduced complexity in their early developmental stages. A koine is a stabilized composite variety that emerges through sustained interaction or integration among speakers of different dialects. It often acts as a common language (lingua franca) across groups and can develop into the dominant variety within a community.

To illustrate the process and impact of koineization, research by Al-Wer (2007) on Arabic in Amman provides an example of how gender differences can influence the adoption of linguistic features within *immigrant koines*. Female informants in particular often adopt new dialect features more frequently than their male counterparts, with notable distinctions in phonological and consonantal variations. For instance, the glottal stop /ʾ/, serves two functions: it acts as an independent phoneme in words like [saʔal] ‘he has asked’, and as a variant of /g/ in words such as [ʔaːl] ‘he has said’. This variation between [g] and [ʔ] is particularly prominent in Amman. For a number of speakers, these sounds are social markers, distinguishing the Jordanian (gāl dialect) from other dialects (ʾāl dialects), and are also used to differentiate male ([g]) from female ([ʔ]) speech patterns. While Jordanian women consistently use the [ʔ] variant of the (q) variable, reflecting their urban Palestinian influence, Jordanian men predominantly use the [g] variant, which is

emblematic of ethnic Jordanian speech. This variation is not only a marker of identity but also of gender, as observed in different social settings such as schools where children adapt their speech based on their peer group, and at home, where they might revert to their original dialect. Crucially, gender plays a significant role, especially among boys who associate the [g] variant with masculinity, particularly in contexts where asserting physical or social dominance, like fighting, where using [ʔ] might be perceived as a sign of weakness (Al-Wer 2002).

Research on koineization demonstrates that a mix of social, historical, and political elements play a significant role in shaping this process. The power dynamics between speakers of different dialects are essential in determining the outcomes of koineization. Additionally, as already mentioned in Sections 2.1.1 and 2.1.2, factors such as identity, prestige, and attitudes also impact koineization dynamics (Albirini 2016, p. 185). These aspects will receive a more detailed examination, particularly in the context of Arabic, in Chapter 3.

According to Siegel (1985, pp. 373–374), the developmental continuum of koines unfolds in distinct stages, offering insight into the transformative process. These stages are summarized in Figure 2:

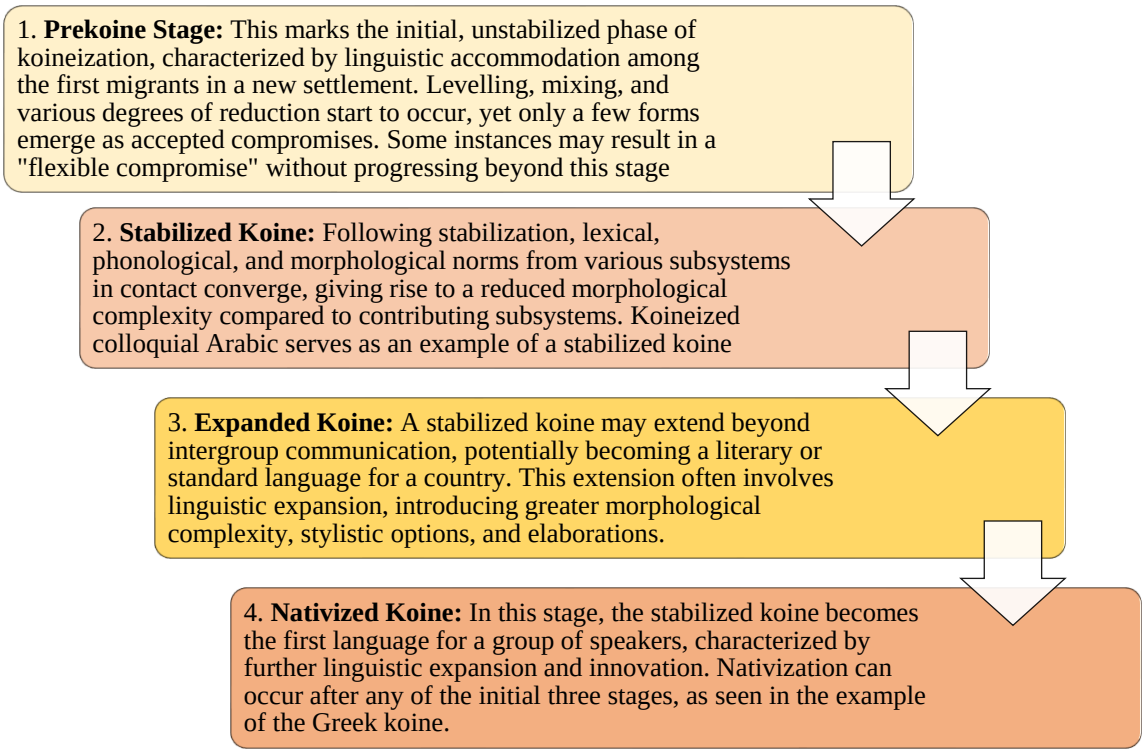


Figure 2. *Stages of Koine Development (Adapted by the Author from Siegel 1985, pp. 373–374)*

The later study by Trudgill (2004, p. 263 f.) suggests a three-stage approach[7] to dialect formation as observed in the development of New Zealand English, which aligns with the experiences of three successive generations of speakers. In the first generation, known as the stage of rudimentary levelling, adult speakers from various regional and social backgrounds come into contact and interact. During the initial period of contact, minority and highly localized linguistic features tend to be leveled out as part of the adaptation process. In many cases, the second generation witnesses variability and mixing, where the first locally-born children are exposed to a diverse array of linguistic features. Their speech is often characterized by considerable variability, both between individuals and within individual speech, including the creation of new combinations of features. By the third generation, a process known as *focusing* may occur, potentially leading to the emergence of a stable and relatively uniform variety. This final stage can mark the crystallization of the dialect, establishing a cohesive linguistic identity for the community.

However, it is important to note that not all communities follow this exact pattern. Owens (2023, pp. 197–198) documents scenarios where no significant change occurs across generations. In his study of Maiduguri Arabic, Owens (1998) contrasts the trends observed in Western urban societies – where clear directions of language change are typically evident within two (Dodsworth and Kohn 2012), three (Trudgill 2004) or four generations (Thelander 1982) – with the situation in Maiduguri. In Western contexts, language change often shows a discernible trend, such as the splitting of variables into Standard Swedish and northern dialects in Burträsk (Thelander 1982) as will be also discussed in the subsequent section 2.2.3. In Maiduguri, however, Owens (1998) found that expected trends, such as the growing dominance of variants from numerically larger groups, did not appear. Instead, smaller social configurations, such as the city, neighborhood, and household, played a significant role. Owens observed that homogeneity within households, a type often resulting from language shifts in Western nations, was actually inherited from urban migrants rather than emerging from interactions with other dialect speakers. This pattern suggests that the smaller the speech community, the more homogeneity reflects an ancestral

[7] It is important to note, however, that his model may not be applicable to all cases as researchers have also identified two-stage or four-stage models. While it is impossible to describe every situation, it is clear that various koineization processes exist, and different developmental pathways have been documented in the literature.

variety. Conversely, larger speech communities might display greater heterogeneity due to their composition of households with different linguistic backgrounds.[8]

In examining the relationship between accommodation and koineization, it becomes evident that while accommodation often coexists with koineization, not every accommodation process results in the formation of a koine. This underscores the significance of shared and salient linguistic features, which tend to persist over time. Furthermore, the temporal dynamics of linguistic subsystem contact reveal that various subsystems can coexist for extended periods without undergoing koineization, as exemplified by the case of North Malaita Scandinavia. Persistent contact situations, characterized by clearly defined social roles, can continue without significant *levelling* (Dillard 1972). Alternative processes to koineization, such as "diffusion" (Hudson 1980) and "borrowings from the vernaculars" (Meiseles 1981) involve the transfer of linguistic features across boundaries but lack the levelling and mixing characteristic of koineization. In addition, shifts in political, social, economic, or demographic conditions can alter the dynamics of language contact. Such changes may lead either to greater interaction across linguistic subsystems or to a renewed emphasis on maintaining linguistic boundaries (Siegel 1985).

To further account for variation in linguistic outcomes, the analysis (Chapter 6) will draw on Mitchell's (1986) concept of *Educated Spoken Arabic*, which addresses the avoidance of stigmatized forms in interdialectal contexts, and Mufwene's (1996) notion of the *feature pool*, which conceptualizes speakers' selection of features from a shared set shaped by mutual intelligibility and social factors. These frameworks help to clarify the sociolinguistic mechanisms that operate during the early stages of contact and pre-koineization.

2.2.3 Mixing

Another key process in dialect contact is *mixing* that primarily involves the development of interdialectal forms, such as phonetically intermediate variants. These 'interdialect' variants, emerging as new linguistic forms, arise from the acquisition and imperfect accommodation of multiple dialects, often representing a compromise between two or more original dialects. Kerswill, Trudgill (2005, p. 197) describe *mixing* as "the coexistence of features with origins in the different input dialects within the new community". In their article,

[8]There are parallels in other Arabic-speaking regions, such as the maintenance of classic Fez features (e.g. /q/ among Fezi female immigrants in Casablanca (Hachimi 2007, p.108). Moreover, confessional dialects in Baghdad and Bahrain have also persisted for centuries (Blanc 1964; Holes 2019), demonstrating that local conditions can support minority varieties.

Kerswill and Trudgill refer to Trudgill's work (1986), which examines modern Newfoundland English, highlighting features that can be traced back to its Southwest English and Irish origins.

In the early phases of language contact, a variety of unfamiliar linguistic forms are encountered, but as communities stabilize, the use of diverse dialect variants often declines, leading to the formation of a koine, as detailed in Trudgill's work (1986). Thelander's (1982) studies on Swedish dialects offer a parallel in the gradual alignment towards Standard Swedish, as seen in the merging of traditional three-gender systems into the two-gender system of the standard language. His observations in Burträsk, for example, revealed a decreasing distinction between masculine and feminine forms for inanimate nouns. Thelander's longitudinal study tracked changes across four generations, finding initial consistency in the usage of Standard Swedish and northern dialect forms in earlier generations. By the generation born after 1956, a distinct shift occurred: while certain features increasingly aligned with Standard Swedish, others retained dialectal characteristics. Notably, the use of the northern dialect negative *int* persisted over 95% among the fourth generation, while usage of Standard Swedish *var* ('were') approached 100%. This shift towards either Standard Swedish or a northern dialect in later generations was significantly more pronounced than in earlier ones, indicating a marked decrease in dialect mixing over time.

Thelander (1982, p. 72) specifically highlights that by the fourth generation, three changes that were previously trending towards Standard Swedish took a sharp turn towards dialectal usage, resulting in a usage pattern that was essentially bimodal – either Standard Swedish or northern dialect for a given variable, to a far greater degree than any of the previous three generations. The results in Thelander's study relate to the concept of interdialect forms, as defined by Kerswill, Trudgill (2005, p. 199). These interdialect forms are new linguistic variants that emerge from the interaction between different dialects as a consequence of dialect contact and mixing, rather than being present in the original dialects. They categorize these forms into three distinct types (Kerswill, Trudgill 2005, p. 199):

(a) Simpler or more regular forms compared to those in the original dialect mixture.

(b) Intermediate forms, often phonetically situated between two contributing dialects in the mixture. This category also includes new morphological or lexical

combinations derived from multiple contributing dialects, resulting in essentially novel coinages.

(c) Forms resulting from hyperadaptation, a process where speakers attempt to emulate higher-status accents but mistakenly apply changes inappropriately. The most common example of this is 'hypercorrection'.

For instance, Woidich (1994) notes that the contemporary Cairene dialect results from the mixing of several dialects around Cairo. Expanding on this, Woidich (1996) identifies examples of *dialect mixing* and *levelling* (see subsequent section) in Egypt's rural dialects, such as those from northern and Upper Egypt. Here, *dialectal mixing* and *levelling* arose from interactions between settled centers and nomadic Bedouin tribes. For instance, unlike the Cairene dialect which uses /ʔ/, some rural areas employ /g/. They also maintain feminine plural pronouns and affixes, such as *intin* for "you (FP)" and *yimšan* for "they (F) walk," as well as use the *n-* prefix in the first-person singular imperfect form of verbs, as in *niktib* for "I write."[9]

This interplay between settled centers and nomadic influences in rural Egypt, as noted by Woidich, sets the stage for further exploration of dialect mixing in urban settings. Miller's (2005, p. 943) study complements this by investigating dialectal accommodation among migrants from rural areas to Cairo, Egypt, where *mixing* also takes place. These migrants encountered a linguistic environment where their own dialects were less prestigious compared to the Cairene dialect – a national prestige variety. A significant feature of the migrants' speech is the emergence of mixed forms that mix Cairene Arabic (CA) and Upper Egyptian Arabic (UEA) features. For example, migrants might maintain the CA phoneme *q as [ʔ] but preserve the UEA vocalic patterns in words like *ʔiddām* (UEA: *giddām* / CA: *ʔoddām*) 'in front', or use the CA *j as [g] while maintaining UEA verbal patterns in expressions such as yāgi (UEA: *yāʒi* / CA: *yigi*) 'he comes'. For instance, the word *gu* (UEA: *gu* / CA: *gum*) meaning 'they came', has been identified among second-generation speakers.

[9] Miller (2004) notes that urban koineized dialects in Arab cities have emerged as national or regional standards, driven by socioeconomic prestige and the developmental trajectories of Arab nation-states. These dialects, which mix traditional and modern linguistic elements through koineization, are replacing rural and Bedouin varieties, especially in major urban centers like Cairo, Damascus, Amman, and Algiers, which are focal points of economic and educational activity.

2.2.4 Levelling

Levelling is a concept widely explored in the literature on traditional dialectology and variationist sociolinguistics (Kerswill 2003; Neil 2011; Trudgill 1986; Williams and Kerswill 1999). This concept aims to account for the tendency, in dialect contact settings, for a single variant to emerge from the convergence of multiple dialectal realizations of the same variable (Britain 2010, pp. 194–195). The process is typically characterized by a levelling of regional differences, the loss of marked local features, and the development of new forms that gradually gain acceptance across a wider geographical area (Williams and Kerswill 1999, p. 149). *Levelling* is a phenomenon in which local linguistic expressions are substituted with those that have a more extensive geographical presence (Cheshire et al. 1999, p. 1).[10] Milroy (2002, p. 7) offers a socially significant interpretation of linguistic levelling, associating it with the conditions brought about by social or geographical mobility and subsequent dialect contact. She argues:

> "This process might reasonably be viewed as a linguistic reflex of the large-scale disruption of close-knit, localized networks which have historically maintained highly systematic and complex sets of socially structured linguistic norms. Such disruption arises from (for example) internal and transnational migration, war, industrialization and urbanization." (Milroy 2002, p. 7)

It has been observed that *levelling* is the process that tends to diminish linguistic distinctions, representing a distinctive form of language change (Hinskens 1998, p. 36). Kerswill (2003, p. 1) identifies two primary mechanisms behind the phenomenon of linguistic change. The first process, geographical *diffusion*, is often described as the spread of linguistic features from a populous, economically, and culturally influential center outward, initially reaching nearby towns and cities before extending to the more rural areas in between (see also Britain 2004). The second mechanism, *levelling*, refers to the reduction or loss of marked variants, where 'marked' denotes forms that are "unusual or in a minority" (Trudgill 1986, p. 98).

[10] As noted by Kerswill (2003, p. 1), when *levelling* occurs over a broad geographical area, it is specifically termed *Regional Dialect Levelling* (see section 2.2.5), and thus, the use of one term implies the other.

A related development involving *levelling* but peculiar to Arabic is *Educated Spoken Arabic* (ESA)[11]. Mitchell (1984) describes ESA as a mixed Arabic variety used predominantly among educated speakers. In intercommunication between Arabs from different countries, Salam (1980) found that interlocutors often discard marked dialectal variants in favor of common koineized forms. For example, an educated rural Jordanian speaker might shift the emphatic /ḍ/ in *haaḍa* 'this.M' to a non-emphatic /đ/ or /d/, resulting in *haađa* or *haada*.

Levelling and ESA are similar in that both processes involve the reduction of linguistic variability and the creation of more uniform speech patterns to facilitate communication across different linguistic groups. *Levelling* reduces linguistic distinctions by eliminating marked variants, leading to a more homogenous dialect within a community. Similarly, ESA blends elements from different dialects and Standard Arabic to form a standardized yet flexible form of communication among educated speakers. Both processes serve to bridge linguistic gaps and create a common ground for effective communication, although through slightly different mechanisms. While ESA facilitates communication through intentional code-switching and adaptation, linguistic *levelling* is a separate phenomenon. *Levelling* is a natural process within speech communities where marked variants are gradually reduced or lost, leading to a more uniform dialect. This simplification reduces regional or social variations and homogenizes speech patterns through regular interaction (Kerswill 2003; Trudgill 1986). Therefore, ESA and linguistic *levelling* represent distinct but complementary aspects of language change in Arabic-speaking regions. This will also play a key role in the discussion of my results (see 7.2).

Several factors are believed to underlie the concept of *levelling* such as individuals' spatial mobility (Britain 2009), linguistic convergence and divergence (Hinskens 1998), speakers' social network integration (Milroy 2002), social class (Labov 1966), and communities of practice (Eckert and Wenger 2005). The increased mobility of individuals within these networks can contribute to the diffusion of linguistic forms, influencing the dynamics of *levelling*. The integration of an individual speaker into the their own (in-group) or outside it (out-group) can significantly influence forms of change. Additionally, the *levelling* process can be influenced by elements such as feeling of identity/belonging,

[11] Mitchell (1986) states that this variety is predominantly used among the educated class, particularly those with a good knowledge of SA. As the Arabic name, 'medial language', implies that ESA does not have a fixed grammar but adheres to discernible norms. Speakers may incorporate varying degrees of SA and dialect based on factors such as topic, audience, and venue.

attitude, and ideology, often resulting in the adoption of appealing features and the avoidance of stigmatized ones.[12]

Research suggests that dialect maintenance is more common among individuals with close-knit relationships (Milroy 1980), whereas dialect levelling is often observed in those with loose-knit social ties (Kerswill 2003). A case in point is the residents of Belfast, who tend to have minimal contact with external communities, largely due to their dense in-group networks. It has been suggested that populations with high mobility and frequent dialect contact tend to experience a weakening of social ties, which in turn speeds up the process of dialect contact (Williams and Kerswill 1999). During social interactions, individuals adjust their communication styles to achieve various objectives, one of which is to signify their affiliation with either in-group or out-group members. This differentiation occurs through interactions within their own speech communities (in-group contacts) or with those outside (out-group contacts) (Willemyns et al. 1997, pp. 3–4). As Coupland et al. (1988, p. 25) observe, labeling a situation as 'intergroup' often involves attributing generalized traits to the out-group while reinforcing alignment with the perceived norms of one's own group. They also highlight that the extent to which individuals adapt their speech is closely tied to their identity. Those with a strong attachment to their in-group are more likely to maintain their distinct linguistic features, using them to emphasize their unique identity (Coupland et al. 1988, p. 5).

Giles and Billings (2004) highlight that individuals with a strong connection to their social group often show a preference for their own dialect, especially when it symbolizes in-group pride. The propensity to accommodate linguistically is also shaped by the ratio of in-group to out-group interactions. Britain (2009) notes that an increase in out-group contacts often prompts individuals to diverge from their original dialect. This divergence paves the way for the adoption of new linguistic traits, a process (Britain 2009, p. 124) describes as the diffusion of innovation. This kind of change is predominantly initiated by dense networks of out-group contacts, commonly seen when individuals relocate and assimilate into a new speech community. In such cases, they tend to adopt the local dialect's traits over those of their native dialect. This adaptation process can lead to the emergence of what Trudgill (1986, p. 40) refers to as "interdialect" forms, blending/intermediate elements from both the native and the host dialects.

[12] See for example Cotter and Horesh (2015) on Jaffans in Ghazza.

As the terms *koineization* and *dialect levelling* are often used interchangeably, Siegel (1985, pp. 365–367) provides a clarifying distinction between these two linguistic phenomena. He elucidates the common misconceptions and outlines the differences, highlighting that while they may appear similar, they exhibit distinct characteristics as they progress. *Dialect levelling* typically refers to a scenario where multiple dialects in contact mutually influence and effect changes in each other, yet this does not necessarily lead to the emergence of a new, compromise dialect. On the other hand, koineization is marked by the mixing of features from different dialects, resulting in the creation of a new dialect. The defining aspect of koineization is its capacity to develop a novel, composite dialect that becomes widely adopted among its speakers.

Levelling, as defined by Milroy and Gordon (2003), is the process that gives rise to regional standards, essentially constituting supra-local levelled varieties. Thus, *dialect levelling* has the potential to lead to the establishment of supra-local norms, which will be the focus of the following section.

2.2.5 Regional Dialect Levelling and Supralocalization

The concept of *dialect levelling* or *supra-localisation* addresses the process where, due to increased mobility and dialect contact, linguistic variants of broad socio-spatial significance become more widespread, leading to a reduction of more localized forms (Britain 2010, p. 194). In regions where dialects come into contact, these resulting supra-local varieties tend to favor features widespread across a region or country while avoiding prominent linguistic features closely associated with specific dialects or social groups. Kerswill (2003, p. 1) argues that when this *levelling* extends across an extensive geographical domain, the more appropriate designation is *Regional Dialect Levelling* (RDL), with both terms being interchangeable. To go into more detail, RDL is the loss of local dialect distinctions such that a relatively homogeneous regional variety develops (Hinskens 1998). *Dialect levelling* often reflects both geographic and social positioning, occurring when language forms with broader socio-spatial reach replace more locally confined variants (Britain 2009, p. 1). This process has been investigated for different languages, such as English (Britain 2009; Cheshire et al. 1999; Kerswill 2003; Milroy 2002), French (Hornsby 2007), and Arabic (Al-Rojaie 2013; Manfredi 2012; Versteegh 1993).

Dialect levelling, although heavily influenced by geographic mobility, does not necessarily involve unidirectional migration. One example includes the diffusion of certain

linguistic variants from urban centers outward to small towns and rural areas, as in the diffusion of some features of London English to Southeast England (Torgersen and Kerswill 2004; Williams and Kerswill 1999). A different scenario is found in Sandøy's (1998) study of the diffusion of a simplified nominal morphology system in Norway, which appears to have spread from relatively small cities to the surrounding areas, not from the major urban center of Trondheim. Another instance is found in Hinskens' (1998) description of *dialect levelling* as evidenced by data from Rimburg, a small town in a Dutch province that urbanized during the early twentieth century due to the availability of coal-mining jobs. Local linguistic features are disappearing from Rimburg in favor of those with wider geographic distribution, but there are also four local linguistic features that are being retained at the expense of the standard dialect.[13]

2.2.6 Simplification

Simplification is a recurring theme in discussions of language contact, frequently cited in both general linguistics and the Arabic/Semitic tradition. It refers to any process that reduces structural complexity without compromising meaning or informational content. This includes the regularization of irregular forms, greater transparency in lexical and morphological structures, and the removal of redundant elements (Britain 2009; Trudgill 2009).

This phenomenon is often linked to population growth, particularly through immigration, where adult learners contribute to the language's simplification (McWhorter 2007). McWhorter (2007) argues that languages serving as lingua francas, like some Arabic dialects, undergo simplification due to non-native speaker acquisition. He differentiates between Old and Neo-varieties of Arabic, identifying Bedouin Arabic as the most conservative and noting that certain dialects, such as Lake Chad Arabic (LCA), exhibit significant simplification. However, this interpretation has been criticized by Owens (2023), with detailed analyses showing that many of McWhorter's simplification claims for LCA are incorrect or ambiguous. For instance, LCA does not consistently reduce short vowels or collapse /i/ and /u/ (for a detailed discussion see Owens 1998, pp. 39–40).

[13] In Arabic, for instance, the study on the Qaṣīmī dialect in central Saudi Arabia by Al-Rojaie (2013) highlights a regional dialect levelling process where younger, educated speakers, especially women, increasingly adopt the supralocal [k] variant over the local [t͡s]. This shift is linked to broader socioeconomic changes and rapid urbanization.

The possibility of simplification has also been examined for instance by (Labov 2007, p. 383) who referred to simplification in the context of vowel systems, highlighting the loss of complex morphological conditioning factors as dialects traveled from NYC to the western and southern regions. He illustrated how the Northwest system, characterized by the complex phonological, grammatical, lexical, and stylistic constraints influencing the tensing and raising of short /a/, underwent simplification as it spread to Albany, Cincinnati, and New Orleans.

2.2.7 Reallocation

Another outcome of dialect contact is *reallocation*, a phenomenon where "one or more variants in the dialect mix survive the *levelling* process and are refunctionalized, evolving new social or linguistic functions in the new dialect" (Britain and Trudgill 1999, p. 245). This captures the essence of former dialectal variables transitioning into social variables, illustrating the dynamic processes by which a variant, once associated with a specific dialect, takes on a new role as a social variant in the urban context.

Many examples, as will be seen below, correspond with traditional approaches to reallocation as an alternative to *levelling*. Essentially, reallocation unfolds as a long-term consequence of *koineization* across generations, wherein competing variants eventually adopt distinct stylistic, social, or grammatical roles. Koineization is understood as a multi-stage process with overlapping phases and a variable yet finite timespan (Kerswill 2004, p. 679). *Reallocation* typically occurs in its final phase, reflecting the cumulative outcome of prolonged contact-induced linguistic change (Trudgill et al. 2000). Table 1 presents the stages of koinezation within different generations, including the involvement of speakers and linguistic characteristics:

Stage	Speakers involved	Linguistic Characteristics
I	Adult migrants	Rudimentary levelling
II	First native-born speakers	Extreme variability and further levelling
III	Subsequent generations	Focusing, levelling and reallocation

Table 1. *Stages of Koinezation within Different Generations (according to Kerswill 2002, p.679)*

Kerswill (2004, p. 679) stresses the variability in this scenario, and, in particular, the fact that these stages can take two or three generations to develop. Upon completion, this process yields a koine, or a "new dialect" (Trudgill 1999). For instance, Wilkerson et al. (2014) observe that in Wisconsin, it took generations for some immigrant groups to master English, leading to sustained bilingualism and the emergence of distinct regional English varieties over a century after their initial settlement.

An earlier investigation by Britain and Trudgill (1999) examines stylistic reallocation resulting from koineization in varieties that preserve numerous competing variants of a form through reindexicalized functions related to register or class. A notable example is found in the continued existence of diverse pronunciations of the vowel in the ROOM lexical set in Norwich, including /uː/ (*school*, *goal*, *nose*), /ʊ/ (*pull*, *put*, *jome*), and /ʉː/ (*you*, *soon*, *loose*). Initially representing distinct regiolects (West Norfolk, South Norfolk, and North and East Norfolk), these vowels, following migration, long term contact as well as urbanization, did not undergo levelling to a single form in Norwich. Instead, they experienced reallocation from regiolectal variants to social status variants, wherein the use of /uː/ is associated with high status, /ʊ/ with middle status, and /ʉː/ with low status.

Al-Wer (2007) presents a case of the alternation between [g] and [ʔ] which was already mentioned in Section 2.2.2. It has experienced both stylistic and social reallocation over time. Initially, the choice between [g] and [ʔ] was closely tied to the regional background of the speakers, with Jordanians typically using [g] and urban Palestinians opting for [ʔ]. However, as the community evolved into the second generation, a gender-based pattern emerged, where [ʔ] became associated with female speakers and [g] with male speakers. This gender-based usage of (g) was passed down to the third generation, who then redefined the social context of these variants, leading to a refunctionalization of their use.

Chapter 3: Sociolinguistic Perspectives on Arabic in Contact

In this chapter I will provide a literature review that focuses on the multifaceted outcomes of language and dialect contact that were discussed in the previous chapter. This exploration is crucial, serving as the foundation for the detailed analyses that follow. Central to this discourse is the phenomenon of language contact, a key element in understanding the dynamics of language maintenance and attrition. On the one hand, I will examine how this concept manifests within the context of Iraqi and Syrian diasporas in Germany. On the other hand, this chapter will also explore dialect contact studies, particularly focusing on Arabic dialects, which plays a significant role in the later discussion on the interaction patterns among Iraqis and Syrians in Germany. Considering both aspects is especially relevant considering their unique socio-cultural backgrounds and experiences as migrants in a predominantly German-speaking environment.

Shifting focus to the role of prestige in Arabic dialects, it is crucial to recognize its significance in the dynamics of dialect contact. As discussed in Section 2.1.1, prestige refers to the level of esteem associated with a particular language or dialect within a speech community, compared to others. Prestige varieties are those language or dialect groups deemed by a society to be the most “correct” or superior in some way. Therefore, the influence of prestige on dialect interaction cannot be overlooked. In this context, a brief discussion on how prestige influences language choices in these communities will be included to provide a comprehensive understanding of the sociolinguistic landscape within diasporic Arabic-speaking communities in Germany.

3.1 Arabic Dialects and Prestige

Most sociolinguistic research has focused on languages with a well-defined prestige variety. This variety is often the standard form in many Western languages, or it might be a vernacular in diglossic societies, such as those in the Arab world. Here, the concepts of 'standard' and 'prestige' can denote different linguistic forms (Ibrahim 1986). Owens (1998) highlights a distinct sociolinguistic scenario in minority languages, where a language may lack both a standard and a prestige variety. An example is Arabic in Northeast Nigeria, a minority language without a standard or prestige variety, overshadowed by dominant public languages like Hausa, Kanuri, and English, which most Maiduguri Arabs

speak (Owens 1998, p. 233). In such sociolinguistic contexts, where neither a prestige nor a standard variety exists, linguistic changes tend to occur without a clear directional pattern. This contrasts with the situation in some Arab nations, such as Bahrain and Jordan, where urban linguistic changes generally move towards the prestige variety (see also Abdel Jawad 1987; Holes 1987).

The Arabic linguistic landscape has long been characterized as diglossic, a concept where two language varieties coexist with distinct roles in the community (Ferguson 1959; Haeri 2003). Diglossia typically separates Classical Arabic, the language of the Quran and literature, and colloquial Arabic, used in daily spoken communication. While Classical Arabic is taught in schools and holds cultural and religious prestige, it is not a native language (Al-Wer 1997). It is regarded as a significant symbol of Arab culture and Islamic religion, yet it does not have native speakers nor is it considered a prestigious language for everyday communication. Conversely, Colloquial Arabic, which is naturally acquired and remains unwritten, serves as the primary medium for daily interactions (Ibrahim 1986, p. 118).

However, Ibrahim (1986, p. 118) and others argue that Arabic speakers' choices are not limited to Standard Arabic (SA) and their local dialect but include a range of variants from different Arabic vernaculars, some of which themselves may carry local prestige. This led Al-Qenaie (2011, p. 1) to describe Arabic as "multiglossic" where a continuum of phonological, morphological, and syntactic forms from various colloquial varieties and SA exists[14]. This multiglossia is especially evident in urban centers, which are melting pots of regional dialects.

Unlike Western contexts, where the standard variety often holds prestige, in the Arab world, prestige needs to be broken down into differentiated, contextualized variants. Standard Arabic is a codified, official prestige form, but in multidialectal settings a local dialect may be perceived as prestigious (e.g., Abdel Jawad 1987; Ibrahim 1986). Holes (2011, p. 138; emphasis in original) understands that "Modern Standard Arabic *is* a prestigious variety of Arabic, no one would deny that, but it does not carry the type of prestige that matters in everyday interaction between ordinary Arabs, whatever their level of education".

[14] He describes the speech environment in Kuwait as multiglossic, consisting of seven overlapping levels that exist within a functionally distributed sociolinguistic relationship.

Understanding the impact of dialect contact in Arab communities, therefore, involves recognizing the social prestige of different Arabic vernaculars. Furthermore, he notes that prestige in this context is derived from the status given to the dominant local Arabic variety. Thus, it is expected that the dialects of major Arab capital cities possess what is termed 'covert' prestige, in contrast to the 'overt' prestige of Modern Standard Arabic. Examples include Cairene in Cairo, Damascene in Syria, and Muslim Baghdadi in Iraq (Holes 2011, p. 138).

The literature generally categorizes Arabic dialects into Bedouin and Sedentary types that reflect diverse social structures, employment patterns, and cultures (Holes 2011, p. 132). These classifications, as summarized by Palva (2006), distinguish between nomadic Bedouin dialects common in the Arabian Peninsula, and Sedentary dialects found among settled populations. Sedentary dialects further divide into urban dialects, prevalent in major cities, and rural dialects tied to agricultural communities. These linguistic variations often align with the speakers' genealogy, geography, lifestyle, and even sectarian and national identities, sometimes influencing dialect prestige (Miller 2007, pp. 4–5). Dialects in economically dominant urban areas tend to gain prestige, while those in marginalized communities, such as Eastern Beirut's Shiʕi areas and Cairo's migrant suburbs, often face stigma (Miller 2007, pp. 8–9).

Miller (2004) argues that the dominant language varieties in Arab cities are largely the product of koineization. Traditional sedentary dialects, now often limited to groups like older women (e.g. in North Africa), have given way to urban koineized forms that have become regional or national norms. These urban dialects gained prestige through the socioeconomic status of their speakers. The rise of Arab nation-states and the decline of Bedouin influence have accelerated their spread, gradually displacing rural and Bedouin varieties. Cities such as Cairo, Damascus, Amman, and Algiers – centers of education, employment, and economic power – have played a central role in this shift.

It is important to recognize that stigmatization of dialects always stems not from the dialects themselves, but from the values and traits attributed to their prototypical speakers. Over time, these stereotypes can become ingrained in the social, personal, and linguistic identity of the dialect users. For instance, Bedouins, who are generally less educated and socioeconomically disadvantaged compared to urban populations, may find their dialects associated with indices of lower education and poverty. This is in contrast to urban dialects, which might not carry these connotations (Albirini 2014).

3.2 Attitudes towards Arabic

Language attitudes is a broad field with numerous studies focusing on various Arabic varieties. While this topic plays an important role in the discussion of findings in my study, it requires a distinct methodological approach. Therefore, it will only be briefly mentioned here as it intersects with other primary themes explored.

In studies about language attitudes, language is often seen as a marker of identity and loyalty as well as an indicator of status within every speech community (Fishman 1971). Spoken language can serve as an identifying trait of members belonging to a national or cultural group, and listeners' attitudes toward individuals from a specific group may often extend to the language they speak. From this perspective, evaluative responses to a spoken language might mirror those elicited by interactions with individuals perceived as members of that language group. However, since language use is a behavior shared among various individuals, hearing the language is likely to evoke generalized characteristics associated with the group (Gardner and Lambert 1972, p. 293).

Research on Arabic sociolinguistics has in some way dealt and discussed issues of language attitude in the Arab world. The Arabic language has become an essential means in theorizing and creating power, nationalism and pan-nationalism in the Arab world (Suleiman 2003). Different Arabic varieties identify speakers from different Arab countries, with the result that Arabic variation becomes an identity marker. Arabic is connected to the Islamic religion as the Quran was delivered in this language. Arabic language itself has become "a powerful signifier, a ready resource for those who wish to link Arabic and group, political, or religious identity, often collapsing these latter categories" (Walters 2006, p. 654).

Standard Arabic (SA) is highly esteemed and is often associated with scholarly pursuits and religious practices, as stated by Haeri (2003). For instance, Educated Egyptians, including writers and journalists, tend to particularly value SA for its use in intellectual, creative, scientific, and political contexts, as well as in religious sermons. Conversely, QA is often perceived as indicative of a lack of education and limited to everyday interactions, which can detract from its prestige when used in non-traditional settings (Haeri 2003). These language attitudes reflect deep-seated norms and perceptions within the speech community. Confirming these sentiments, empirical research shows a consistent reverence for SA over QA among different groups. For example, Hussein and El-Ali (1989) observed that Jordanian students hold SA in higher esteem than their colloquial dialects. Similarly,

Saidat (2010) noted that despite their limited fluency, Jordanians hold a more favorable view of SA compared to QA, underscoring the broader regional appreciation for the standard variety over colloquial forms.[15]

In the context of Arab migrants in Germany, insights on speakers' attitudes towards a language or language variety might provide information about a speaker's language behavior and why a particular language or variety in conversations is chosen rather than another one that is spoken in their community. Choosing to speak a language or a language variety, the speaker might be aware of sets of beliefs associated with it. This refers especially to speakers living in multilingual communities (Haeri 1997). Through the investigation of language attitudes, aspects such as speaker's opinion, feelings of loyalty towards a language or language variety as well as language prestige can be discovered (Obiols 2002).

3.3 Arabic in Contact Situations

Previous research on dialect contact within Arabic-speaking communities has often lacked systematic quantitative analysis of linguistic features from a comparative variationist perspective. Additionally, this field of study has been hampered by an absence of socio-historical context, crucial for assessing linguistic change (Owens 2013a, p. 11). Over the past fifty years, significant migration within the Arabic-speaking world, driven by rural-urban and urban-urban movements as well as economic and political factors, has brought diverse dialects into contact that historically had little or no interaction. This influx, influenced by tourism and political upheaval, provides a rich context for studying the dialectal diversity and the ensuing linguistic evolution. Investigations into Arabic within the context of contact linguistics have thus uncovered a link between linguistic evolution and the movement and interaction of people, suggesting that the formation and development of modern Arabic dialects primarily involve a process of convergence (see Section 2.2.1).

Numerous studies have explored linguistic shifts prompted by mobility and internal migration, such as those by Williams and Kerswill (1999) and Britain (2009). In the Arab context, several studies have focused on dialect contact in various countries, including

[15] The preference for SA shifts when compared to languages like French and English. El-Dash and Tucker (1975) found that although Egyptian students generally preferred SA and QA within their own cultural settings, they saw English as more useful globally. Shaaban and Ghaith (2002) reported that Lebanese students valued Arabic for educational and media use, French for its cultural relevance, and English for its global significance and potential career benefits.

Bahrain (Holes 1987), Jordan and Palestine (Al-Wer 2007), Syria (Jassem 1987), Morocco (Hachimi 2007), Lebanon (Abou Taha and Levey 2022), Saudi Arabia (Al-Essa 2009), and Sudan (Manfredi 2012). Predominantly, these studies align with Trudgill's (1986) approach, examining language changes arising from contact among two or three dialects that are mutually intelligible.

As already seen from the outcomes described in the previous chapter, the three idealized outcomes from the literature on Arabic dialect contact are dominance and assimilation, koineization and maintenance of ancestral forms. However, these outcomes can manifest themselves in mixed forms, influenced by specific socio-dialectal profiles, situational contexts, and linguistic variables. For instance, Holes (1987) and Owens (1998) demonstrate variations in assimilation and koineization, with individuals exhibiting a range of outcomes depending on context.

Holes (1983) focuses on the dialects of Bahrain, highlighting the interplay between the Shiʕa Baharna and Sunni ʕArab dialects. The Baharna, being the original inhabitants with a sedentary dialect, encountered the Bedouin dialect brought by Sunni immigrants in the eighteenth century. Holes' findings reveal a tendency for the Shiʕa to linguistically assimilate to Sunni dialectal norms in areas where Sunnis were the majority. Conversely, in neighborhoods where Sunnis were outnumbered, they tended to maintain their Bedouin dialect. In his study, Holes also notes the emergence of a mixed urban dialect, predominantly favoring Sunni Bedouin features, even when Shiʕa dialect characteristics align with Standard Arabic (SA). Furthermore, Holes identifies specific linguistic variations, such as the assimilation of Baḥarna *j > y, influenced by the dominant ʕArab community's /y/ usage (e.g., Baḥarna *jaa* > *yaa* 'he came'). This assimilation, along with allomorphic variation in basic verb stems, exemplifies a koineization process blending Baḥarna and ʕArab patterns.

Owens (1998) further expands the understanding of assimilation and koineization by showing the diversity of individual linguistic outcomes in different contexts. His research focusses on the distinct rural Western and Eastern Nigerian Arabic dialects. Owens illustrates how Arabic speakers in Maiduguri, when interacting with external groups, tend to adapt to a diverse set of external linguistic norms, reflecting a dominance model. However, within their own family or community settings, they predominantly preserve their traditional ancestral dialect. Owens highlights two major, at times contradictory, factors influencing variation in Maiduguri Arabic: ancestry, representing the rural areas of origin, and neighborhood, reflecting immediate local linguistic contacts within the urban

environment. Context of use was identified as a variable affecting individual language usage, with traditional forms being more common in home settings. Owens' investigation emphasized the maintenance or transformation of the Western "Ngummaati" and Eastern "Balge" Nigerian Arabic dialects in Maiduguri, both known for their contrastive features. For instance, the differentiation between stress on the first or second syllable of disyllabic words, like *kátab* versus *kataáb* meaning 'he wrote,' is commonly regarded as an indicator distinguishing North African (*kataáb*) from Eastern (*kátab*) dialects. Notably, Nigerian Arabic displayed a dynamic interplay between the preservation of inherited structures and contact-induced innovations. Owens' findings suggested that smaller social units exhibited less variation, potentially similar to rural areas. The heterogeneity in variation within Maiduguri Arabic was attributed to the interplay of extralinguistic factors such as ancestry and residence. Furthermore, Owens proposed two key extralinguistic correlates contributing to the preservation of neo-ancestral norms: the minority status of the language and the absence of institutionalization, which denotes the lack of a codified standard form.

Al-Wer (2002) presents another possible outcome of dialect contact, examining language change in Amman, Jordan, through the interaction between Jordanian Arabic (the Sult dialect) and Palestinian Arabic (the Nablus dialect). Her study comprised 30 participants spanning three age groups, ranging in age from 12 to 70. The outcome of this linguistic interaction gave rise to a koine, a novel linguistic variety that incorporates elements from neither of the two dialects. The emergence of novel dialectal forms is particularly evident among younger speakers, whose speech combines Palestinian phonological features with Jordanian phonetic characteristics. Referencing Trudgill's (1986, pp. 60–61) notion of a "fudged form", Al-Wer (2002, p. 77) identifies a reversed phonological pattern, in which speakers integrate Palestinian Arabic's phonology with Jordanian Arabic's phonetic norms.

For instance, male speakers, driven by their local identity, embraced the Jordanian /g/ variant, while female speakers opted for the Palestinian variant /ʔ/ (Al-Wer 2002, p. 67). Beyond the /g/ sound, both male and female speakers displayed a preference for numerous Palestinian consonantal features. Al-Wer (2002, pp. 65–66) attributes this divergence to the historical absence of urban centers and urban populations in Jordan before the urbanization of Amman.

In a later study, Al-Wer (2007) further examined dialect mixing in Amman, analyzing linguistic variation across three generations – grandparents, parents, and children. Participants included first-, second-, and third-generation residents with Palestinian and

Jordanian backgrounds, ranging from 12 to 78 years old. Employing this cross-sectional data-collection approach, Al-Wer aimed to trace the diachronic evolution of the Ammani dialect. She identifies three distinct stages of change in the native dialects of the participants based on the observed mixing patterns in their speech. In the initial stage, the dialects of first-generation immigrants underwent a rudimentary levelling process, as part of a broader koineization phenomenon (Al-Wer 2007, p. 73). The second stage is characterized by the unsystematic blending of linguistic forms among speakers from different dialects, which manifests in the speech of second-generation individuals born in Amman. The final stage marks the emergence of a new, stable, and prestigeful variety, namely the Ammani dialect, which is primarily spoken by third-generation individuals born in Amman. These examples demonstrate that the process of koineization can lead to the creation of various types of koines. The research conducted by Holes on verb forms in Bahrain and Al-Wer's investigation in Amman both provide evidence of the development of koines that are prevalent across entire communities.

A different potential outcome of dialect contact is seen in Miller's (2005) study, which focuses on dialectal accommodation among Upper Egyptian migrant communities in Cairo, Egypt. Focusing on data from seven adult speakers, Miller's analysis includes 21 linguistic features, considering not only the variants specific to Cairo and Upper Egypt, but also the influence of Standard Arabic. The speakers originate from rural areas and their dialects significantly differ from Cairene Arabic, which holds a prestigious status as a national variety. The research underscores the interplay of contextual and social factors influencing language variation and change in situations involving dialect contact. Miller's analysis shows that while the shift towards Cairene Arabic among the speakers observed is slow, it is notably pervasive, with the level of adaptation varying depending on the linguistic aspect under consideration. Factors such as the speakers' social networks and prevalent social ideologies in Cairo regarding Upper Egyptians further impact the extent of accommodation. It is noteworthy that the first migrant generation's level of adaptation to Cairene Arabic varies based on the linguistic features, as well as the nature of their interactions, topics of discussion, and individual characteristics. Remarkably, the shift to the Cairene variety may occur within a single generation.

Hachimi (2007) focuses on the social and linguistic consequences of dialect contact between speakers from Fes and Casablanca in Morocco, particularly among fifteen female Fessi migrants in Casablanca. Hachimi investigates how dialect levelling and maintenance impact their identities and attitudes. Given the higher social and linguistic status of Fessis

and the perception of the Casablancan dialect as “rural”, “non-prestigious” and “masculine”, her research highlights the dynamics of these dialect interactions. The study finds that all participants maintain the Fessi /q/ variant in most lexical instances, except in the verb [qa:l] 'to say', where both [qa:l] and [ga:l] are used by women, aligning them more with the Casablancan identity. A crucial aspect of shaping a Fessi-Casablancan identity involves the belief of being “tougher” than traditional Fessis from Fez, and this is reflected in the diminished use of certain Fessi-specific linguistic traits. This language choice is part of shaping a Fessi-Casablancan identity, balancing between retaining “pure” Fessi traits and levelling them to align with Casablancan norms. Hachimi also observes that dialect levelling is linked to weaker Social Network Integration (SNI) with in-group members. Notably, despite the usual association of dialect levelling with negative perceptions, both those who adapt and those who maintain their dialect hold positive attitudes towards their local dialect.

Al-Essa's (2008) study focuses on dialect contact in Saudi Arabia, where the conservative Bedouin Najdi dialect intersects with the more urbanized Hijazi dialect. Unlike other sedentary Arabic dialects like Cairene Arabic, the Urban Hijazi dialect still exhibits remnants of these distinctive features. Al-Essa explored the relationship between 10 linguistic variables and three social factors: age, gender, and the level of contact. The investigation focuses on the variability in using three interdental phonemes (/θ, ð, ðˤ/) and the affricate /ʧ/. The results highlighted that the degree of contact significantly outweighed age and gender in influencing linguistic variation. Younger participants tended to maintain the Najdi variants more when they had limited contact and a lower level of Social Network Integration (SNI) with the Hijazi community. Al-Essa's analysis encompassed five phonological variables ([θ, ð, ðˤ, k, g]) and five morpho-phonemic variables, including the second person feminine suffix (*-ik*), the third person masculine suffix (*-ih*), the third person masculine plural suffix (*-in*), and the third person masculine plural suffixes (*-aw*, *-uun*). She notes that younger informants tend to align linguistically more with their parents than with peers from the host community, attributing this to stronger social integration within their families (in-group) rather than with peers from the wider host society (out-group).

As already briefly noted in Section 2.2.4, Mitchell's (1986) research into intercommunication among Arabic speakers from various countries also offers insights into the process of koineization. ESA is particularly prevalent among the educated class, who possess a good knowledge of Standard Arabic. Although ESA does not have a fixed grammar, as suggested by its Arabic name 'medial language', it does exhibit discernible norms.

Speakers may adjust their use of SA and dialectal features based on factors such as topic, audience, and venue. Mitchell describes ESA as a hybrid that merges elements from individual dialects with SA. This mxiture often leads speakers to set aside their unique dialectal traits in favor of koineized forms that are more universally comprehensible across the Arabic-speaking regions. This adaptation facilitates wider communication, reflecting broader interactions within the Arabic-speaking community, including exchanges across different dialects and within the diglossic framework involving Standard Arabic, as noted by Ferguson (1959).[16]

Bassiouney (2009) explicitly mentions that understanding regional dialects is mostly tied to everyday life rather than professional or academic settings. This suggests that speakers might not always have the appropriate vocabulary to discuss specialized topics learned through formal education (Bassiouney 2009, p. 16). She emphasizes the significance of ESA by stating:

> "The idea of a shared ESA is important because it is concerned not just with the way people from the immediate community communicate, but with the way different Arabs from different communities communicate across community boundaries." (Bassiouney 2009, p. 16).

Further exploring the sociolinguistic effects of these linguistic adaptations, Owens and Bani-Yasin (1991) examine how phonological features like /q/ and /g/ relate to sociological concepts such as "power" and "solidarity". Their findings suggest that /q/ is typically associated with "power" contexts, while /g/ is more frequently used in interactions that emphasize "solidarity".[17] Similarly, Haeri (2000) identifies /q/ and /g/ as "diglossic variables" that highlight phonological and lexical distinctions between what is deemed "standard" and "non-standard" as well as "prestige" and "non-prestige" language forms. This differentiation often leads to the emergence of "stigmatized forms" (Sallam 1980), which are dialectal variants unique to one dialect and might be perceived as peculiar in settings involving multiple dialects. These forms are generally avoided and marginalized in encounters among educated speakers from diverse national backgrounds.

Understanding the outcomes of dialect contact in a sociolinguistic framework necessitates an understanding of the status of the groups it represents. One aspect that has been

[16] Numerous studies have examined the linguistic characteristics of this variety (e.g. Al-Wer 2002; Mejdell 2006; Bassiouney 2006; Bentahila et al. 2013).

[17] For example, it is associated with positive qualities such as friendship and intimacy (Bani-Yasin and Owens 1991).

somewhat overlooked in Arabic sociolinguistics is the impact of minority status. Minority groups live in linguistic environments with another language or language variety as the dominant one. This factor can complicate the process of koineization, as it involves interactional forums where linguistic choices are made over repeated interactions, akin to the pattern observed across three generations in Thelander's (1982) classic study (see Section 2.2.3). Therefore, contact spans a gamut of outcomes that can be summarized as follows:

- Maintenance of ancestral norms, possibly associated with unsystematic use of alternative variants
- Assimilation to a new, usually urban variety
- Koineization

3.4 Arabic in the Diaspora

Traditionally, a group is defined as a diaspora when its members share a common national, ethnic, and religious background and have migrated collectively at a specific historical moment due to a crisis (Barontini and Wagner 2020, p. 246). Often, this dispersal is associated with trauma (Cohen 2008, p. 180). Such crises may include wars, exemplified by the political turmoil in Iraq and Syria that prompted Arabic speakers to relocate to Germany. In diaspora communities, a strong group identity persists across generations, influenced by a shared collective memory and myths about their original homelands. This chapter will first provide a general definition of "diaspora". The aim is to offer a broad overview of the Arabic-speaking diasporic communities and to highlight important characteristics observed within these groups.

3.4.1 Characteristics of Diaspora

Originally used to describe the forced displacement of certain peoples or communities living dispersedly, "diaspora" is now commonly applied to individuals who identify with a "homeland" in which they no longer reside. This term refers to communities living far from their ancestral homeland (Werbner 2002, p. 120). *The International Organization for Migration* (2024) defines a diaspora as

> "Migrants or descendants of migrants whose identity and sense of belonging, either real or symbolic, have been shaped by their migration experience and background. They maintain links with their homelands, and to each other, based on a shared sense of history, identity, or mutual experiences in the destination country."[18]

This definition is not limited to first-generation individuals but also includes the children born abroad to these individuals, provided they maintain some connection to their parents' homeland. These connections – be they cultural, linguistic, historical, religious, or emotional – distinguish diaspora groups from other communities. With the available modern communication technologies, some authors emphasize that diasporic communities are not necessarily "local". Hence, diasporas can be conceived as both online and offline communities.[19] Drawing from Cohen's (2008, p. 17) work, I list the essential attributes that define diasporic communities:

1. Dispersal from an original homeland, often traumatically, to two or more foreign regions;
2. alternatively or additionally, the expansion from a homeland in search of work, in pursuit of trade or to further colonial ambitions;
3. a collective memory and myth about the homeland, including its location, history, suffering and achievements;
4. an idealization of the real or imagined ancestral home and a collective commitment to its maintenance, restoration, safety and prosperity, even to its creation;
5. the frequent development of a return movement to the homeland that gains collective approbation even if many in the group are satisfied with only a vicarious relationship or intermittent visits to the homeland;
6. a strong ethnic group consciousness sustained over a long time and based on a sense of distinctiveness, a common history, the transmission of a common cultural and religious heritage and the belief in a common fate;
7. a troubled relationship with host societies, suggesting a lack of acceptance or the possibility that another calamity might befall the group;
8. a sense of empathy and co-responsibility with co-ethnic members in other countries of settlement even where home has become more vestigial; and
9. the possibility of a distinctive creative, enriching life in host countries with a tolerance for pluralism.

Cohen's compilation is an incorporation of traditional concepts, Safran's (1991) criteria, and his own insights. However, Cohen (2008, p. 17) underscores the need for caution in applying these characteristics. He emphasizes that not all diasporas necessarily share every

[18] See IOM Germany (2024). Diaspora Engagement. URL: https://germany.iom.int/diaspora-engagement [June 2024].
[19] See also Brinkerhoff 2009) for 'digital diasporas'.

listed attribute, nor do these attributes consistently appear with equal strength across different contexts or periods. The combination and relative importance of these features are essential for characterizing and understanding each diaspora's distinctiveness.

3.4.2 General Overview of Arabic Diasporas

A significant volume of research has been conducted on Arabic in multilingual diaspora contexts, particularly focusing on migrants and heritage speakers of Arabic. This research spans various geographic locations, with a notable emphasis on the United States, as evidenced by studies from Daher (1992), Rouchdy (1992), Albirini, Albirini and Benmamoun (2014), and Albirini and Chakrani (2017), along with contributions from European researchers like Caubet (2001), Abu-Haidar (2012), and Boumans and Ruiter (2012). The studies on the diasporic Arabic-speaking communities encounter a range of contact languages, including British English (Abu-Haidar 2012), French (Boumans and Caubet 2000), (Boumans and Ruiter 2012), Spanish (Vicente 2020), and Italian (D'Anna 2018). The level of detail in documenting these contact situations varies. For instance, interactions with English, French, and Dutch are more thoroughly explored. In contrast, research on the interaction between Arabic and Italian is more recent, and information regarding Arabic-Portuguese contact is relatively limited (D'Anna 2020).

Arabic-speaking diaspora communities often exhibit rapid language shift processes, indicating that the contact-induced changes observed in these communities typically precede language loss. This phenomenon is significant for studying language change in migrant languages because similar changes occur in the standard language spoken in the homeland, although at a slower pace. (D'Anna 2020, p. 306)[20] suggests that the internally motivated changes in diasporic Arabic varieties can be seen as an accelerated reflection of language evolution occurring in the homeland. Therefore, examining Arabic-speaking diasporic communities provides valuable insights into the broader trajectory of the language's evolution, encompassing both contact-induced and internally-driven changes. Understanding the linguistic development of second-generation speakers in these communities is crucial for a comprehensive view of language evolution. D'Anna (2020, p. 307)

[20] D'Anna (2020) can be recommended as the article presents a detailed overview of language change in diasporic Arabic, covering aspects such as phonology, morphology, syntax, and lexicon. It skillfully draws parallels with similar changes observed in non-diasporic varieties of Arabic.

identifies a typical pattern in which there is an initial dominance of the heritage language at home during early childhood. As these second-generation speakers start school and their social interactions widen, they gradually shift to the socially dominant language. This shift underscores the dynamic interaction between the heritage language and the predominant language in society, emphasizing a critical aspect of language evolution in diasporic contexts. To further enhance the understanding of language change within Arabic-speaking diasporic communities.

Highlighting recent advancements in the field, Al-Asiri (2023) sociolinguistic study explores the sociophonetic variation among Iraqi Arabs in the UK, particularly in London and Glasgow. The research examines both forcibly displaced Iraqi-Arab refugees and professional migrants, noting socio-economic differences despite their shared cultural background. The research particularly focuses on English laterals and the positive voice onset time (VOT) of stops, with an acoustic analysis of VOT durations and laterals' clearness/darkness. These phonetic features, which vary between London, Glaswegian English, and Iraqi Arabic, were examined under the influence of linguistic, macro-, and micro-social factors. The findings indicate that regional dialect and migration experience significantly influence Iraqi English variation. These factors, in conjunction with gender, affect the patterns of VOT and lateral production. Notably, Iraqi speakers exhibiting integration attitudes and behavior within their ethnic and national communities showed production patterns akin to monolingual speakers.

In another study conducted in the United States, Stephen (2023) explores the phenomenon of language borrowing among Syrian Arabic speakers. With a history of Arab immigration spanning several centuries, Arabs from various countries continue to migrate to different states in America, encountering challenges in adapting to new cultures and languages. Stephen's research focuses on identifying and analysing English words borrowed and arabized by Syrian Arabic speakers in the United States. The findings reveal that these native Arabic speakers borrow words from English and integrate them into Arabic, applying various phonological and morphological modifications.

Interestingly, the study also uncovers that many heritage speakers are unaware of these borrowings, mistakenly believing that all words they use in Arabic are of Arabic origin.[21]

[21] It is important to note that, unlike Al-Asiri's (2023) study which focuses on refugees, Stephen's (2023) research involves heritage speakers of Arabic. This distinction is crucial as heritage speakers typically grow

In the field of sociolinguistics, there is not much study on Arabic in Germany. One notable contribution, however, is the study by Hassan (2018) on Iraqi-speaking refugees in Germany. Hassan's findings indicate that Iraqi Arabic-German bilinguals primarily rely on their native grammatical structures, using linguistic resources from their own language rather than adopting German grammar. Particularly in areas where the two languages differ significantly, such as definiteness and gender marking, speakers integrate German lexical items into Iraqi Arabic morphological frameworks. For example, they add the definite article *il* to them, for example in ***il***-Kündigung and ***il***-Sozialhilfe (2018: 155). Moreover, in some cases they add the feminine sound plural marker [-aat] in order to pluralize German nouns such as *Bahnhof-**aat**, Ticket-**aat**, Ausweis-**aat*** (2018: 151). In section 6.1.1.2, I will present examples from my own data. It can be concluded that the German-origin lone lexical items are types of established borrowings. These are two of many particularities that also occur in other Arabic varieties as soon as foreign words are used.

Holzer's (2021) study investigates migration-related multilingualism among young refugees from Syria, Iran, and Afghanistan in Germany. The research offers insight into how their unique circumstances of secondary language acquisition, characterized by limited family support and heritage language retention, impact their linguistic development. The study's main objective is to show how the use of multiple languages shapes the language biographies of these young refugees. The research finds that in multilingual settings, primary languages often shift to a secondary role, resulting in a practical, situation-specific bilingualism that separates public and private language use. Additionally, it emphasizes that multilingualism is not only contextually and personally driven but is also deeply intertwined with individual biographical experiences. These experiences, especially as they relate to the placement of languages in the CP-Model (a framework for understanding language positioning), significantly influence language use and the overall construction of language biographies. Holzer suggests that further extensive empirical research is required to ascertain if these patterns are prevalent among young refugees at the beginning of their migration journey.

up in a bilingual environment, often acquiring Arabic at home while being exposed to the dominant language of their residing country from a young age. This differing background from refugees, who may have had more homogeneous linguistic exposure prior to migration, significantly impacts their language use and adaptation patterns.

Despite Arabs being one of the fastest-growing minority communities in Europe, notably in Germany, there remains a significant gap in research pertaining to them. Their increasing demographic presence, while visible, has only recently begun to garner the attention it merits within linguistic research. Moving forward, the next chapter will specifically concentrate on Iraqi and Syrian Arabic, the dialects spoken by the participants in my study.

Chapter 4: Iraqi Arabic and Syrian Arabic

In this chapter, I will give a summary of Iraqi-Arabic and Syrian-Arabic as it is relevant to the variables treated in the thesis, and to defining the dialectal relationship between the two varieties. I will begin with an overview that encompasses the diversity of dialects existing within the borders of Iraq and Syria. Subsequently, the linguistic characteristics that set apart the two varieties will be outlined. It is crucial to emphasize that the linguistic variables described in this chapter have been selected as examples that will provide a preliminary understanding of the significant distinctions existing between the two dialects. This section aims to underscore the uniqueness of each variety and lay the foundation for the later investigation of linguistic accommodation between these two distinct linguistic groups.

4.1 General Overview of Syrian Arabic and Iraqi Arabic

As the Arab speakers in my study primarily speak either Iraqi Arabic or Syrian Arabic as L1, in the following subsections, the focus will lie on these two varieties. There are significant differences between these two dialects, and even within each country, the dialect can differ depending on the region. Various research works on Syrian Arabic, such as those by Grotzfeld (1965), Ambros (1977), Arnold (1998), Behnstedt (1997), Cowell (2005), and Gralla (2006) describe these diverse dialects. Sociolinguistic studies also exist, with Ismail (2007). On the other hand, Iraqi Arabic research predominantly concentrates on dialects from Baghdad and Mosul, as evidenced by works from Malaika (1963), Blanc (1964), van Ess (1978), Abu-Haidar (1991), Erwin (2004), and Jastrow (2006). Additionally, Jastrow (among others) has presented brief descriptions of various *qəltu* dialects (Jastrow 1978). In the subsequent sections, the terms *Syrian Arabic* and *Iraqi Arabic* will be used, specifically representing the Baghdadi and Damascus Varieties.[22]

Giving a general overview, Syrian-type dialects are found not only in Syria but also in Lebanon, spanning three provinces in southern Turkey, and even making a linguistic presence in a village on Cyprus. In Iraq, while Arabic dominates Mesopotamia, Kurdish takes precedence in substantial parts of the mountainous regions. The Iraqi Arabic dialects,

[22] Numerous transcribed audio texts for dialects from both countries can be accessed through SemArch (https://semarch.ub.uni-heidelberg.de/#archive).

closely resembling those in Syria, extend into northeastern Syria and southeastern Anatolia, with a geographical separation from another dialect group originating from northern Arabia. Currently, this third dialect group is predominant in towns and villages situated between Aleppo's eastern border and the western bank of the Tigris, extending into Turkey's Şanlıurfa province (Procházka 2020, pp. 83–84).

Damascus and Baghdad (among other cities) have developed as prestigious and supra regional varieties, used in media and understood by most inhabitants. Following World War One, Syria was placed under French mandate, while Iraq was under British mandate until gaining independence in 1932 and 1946, respectively. In Iraq, English holds a prominent position as the most important foreign language, reinforced by the U.S. military occupation from 2003 to 2010 (Procházka 2020, p. 87).

4.1.1 Iraqi Arabic

Iraq lies to the south of Turkey, north of Kuwait and Saudi Arabia, west of Iran, and east of Syria and Jordan. Iraq boasts a diverse population, leading to significant linguistic diversity within its borders. Arabic stands as the predominant language, while minority languages include Kurdish, Neo-Aramaic, and Turkman. Prior to the 20th century, no comprehensive studies delved into the dialects of Iraqi Arabic. The first notable investigations emerged in the 1960s and 1970s, with contributions from Blanc (1964), Malaika (1963), and Jastrow (1978). These early studies primarily focused on the regional distribution and religious affiliations of Iraqi Arabic. Subsequent decades witnessed a surge in research, with the involvement of scholars like Al-Ani (1978), Bakir (1986), Abu-Haidar (1991), Mansour (1991), Mohammed and Al-Heety (2018), and Al Abdely and Ali (2023).

Baghdad serves as the nation's capital, government center, and financial hub. The remaining inhabitants are predominantly Sunni, with a Christian minority composed of Chaldean Catholics, Assyrians (Orthodox and Catholics), among other religious minorities (U.S. Department of State 2022). Aside from Arabic, the official language, various Neo-Aramaic, Kurdish, and Armenian languages are spoken throughout Baghdad (Abu-Haidar 2006, p. 222).

Arabic dialects in the region include the Muslim *gilit* variety and the *qəltu* intra-communal dialect used by Christian Iraqis (Blanc 1964) that will be described in more detail below. Muslim Baghdadi Arabic, particularly Baghdad Arabic, has become the lingua

franca of Iraq and is widely used in commerce and education. It coexists in a diglossic relationship with Modern Standard Arabic, employed in the media and communication with non-Iraqis (Abu-Haidar 2006, p. 222). The language of Baghdadi Christians is gradually shifting towards the *gilit* variety (Abu-Haidar 1992). Muslim Baghdadi Arabic falls within the Mesopotamian group and shares similarities with Gulf Arabic and dialects spoken in some Syrian regions near the Iraqi border. *Gilit* Arabic has Bedouin origins, in contrast to Christian Baghdadi, which directly descends from Medieval (sedentary) Iraqi Arabic (Jastrow 1978).

Until the late 1950s, Baghdad Arabic incorporated a substantial number of loanwords from Turkish, Persian through Turkish, English, and to a lesser extent, French. While some Turkish and Persian terms are still used for everyday objects, they are gradually being replaced by Anglo-American loans. In the early 20th century, when Baghdad's population was less than one million, specific inner-city districts maintained distinct speech characteristics for generations. However, starting around the 1960s, with internal migration and an influx of people, primarily from the south, Baghdadi Arabic has become more standardized and incorporated certain rural and Bedouin features (Abu-Haidar 2006, p. 222).

Blanc's approach to studying vernacular dialects, centered on Baghdad's dialects, became the cornerstone for many subsequent inquiries into Iraqi Arabic dialects. His *qəltu-gilit* dichotomy continues to serve as a main concept in traditional dialectological studies (Abu-Haidar 1991; Mansour 1991; Khan 1997). These studies predominantly aimed to provide typological descriptions of the dialects rather than examining ongoing changes or delving into profound sociolinguistic interpretations that could reveal variations. The dynamic political climate in Iraq over the past three decades has posed substantial obstacles to the advancement of dialectal and sociolinguistic research, especially in terms of the difficulties that researchers encountered in conducting fieldwork.

Confessional Varieties

Throughout history, Baghdadi Arabic was categorized into three primary dialects, each linked to a distinct confessional group: Christian, Jewish, and Muslim Baghdadi (Blanc 1964). Notably, these dialects exhibited significant differences, such as the pronunciation of the Arabic letter *qaaf* (ق), which was /g/ for Muslim Baghdadis but /q/ for their Christian and Jewish counterparts, aligning with Standard Arabic. Nonetheless, since the 1960s, Baghdad's linguistic landscape has undergone substantial transformations. With the city's

expansion into an extensive metropolis, it has evolved into a melting pot for various Iraqi dialects. In this diverse environment, a koine dialect has emerged, bearing linguistic similarities to the erstwhile *Muslim Baghdadi.* Language dynamics have also shifted in other regions of Iraq. Jewish Iraqi dialects have largely disappeared due to emigration, and linguistic features once associated with specific confessional groups are now recognized as regional variants. For example, the /q/, previously linked to Jewish Baghdadis, is now considered a distinctive feature of the Arabic spoken in Mosul. In contrast, Christian Baghdadi has remained a vibrant dialect, with the city's linguistic landscape enriched by influences from southern dialects (see Abu-Haidar 2006; Blanc 1964).

Subsequent decades observed significant changes in Iraq's landscape. These changes include events like the Iran-Iraq war from 1980 to 1988, leading to substantial casualties, the Second Gulf War of 1990-1991 following Iraq's invasion of Kuwait, which eventually resulted in the federalization and autonomy of Iraqi Kurdistan. Lastly, the 2003 US-led invasion and prolonged unrest led to the displacement of nearly five million Iraqis. The fragile central administration contributed to the rise of the Islamic State as a challenging threat to Iraq's existence. These continuous disturbances have undoubtedly left a profound, although largely unexplored, impact on Iraq's dialectic landscape. However, these recent challenges are not unique in Iraq's history. Linguistic fieldwork conducted in Iraq after 1980 has been limited, resulting in a retrospective perspective in this text, which primarily reflects the situation before the events of the last three decades. Updates are included, sourced from studies involving Iraqis residing abroad. Notably, specific dialectal features are predominantly shared among Iraqi dialects, distinguishing them from non-Iraqi varieties (Holes 2019, p. 64).[23] The most salient are listed here in the following Table 2. Some of the features will be expanded upon in section 4.1.3 when discussing linguistic differences between Iraqi and Syrian Arabic.

[23] For those interested in further studies on Baghdadi Arabic, a number of seminal works are recommended. Wallace Erwin's grammar of Iraqi Arabic (1963), serves as an exhaustive introduction focused mainly on the Baghdadi koine. Haim Blanc's *Communal Dialects in Baghdad* offers a specialized look at the confessional dialects as they were in the 1960s. Farida Abu Haidar's *Christian Arabic of Baghdad* presents a lucid account of the Christian dialect.

	All/almost all Iraqi dialects	*Levantine cities*
Reflexes of the interdental series *t̲, d̲, ḍ̲*	*t̲, d̲, ḍ̲* (an exception to this is CB which has *t, d, ḍ*)	*t, d, ḍ* or *s, z, ẓ*
Reflexes of *q*	*q* or *g* or *g/ǧ*	*ʔ*
Non-past suffix *-n*	e.g. *tketbīn, tketbūn, yketbūn*	*(b)tketbi, (b)tketbu, (b)yketbu*
Object marker *l-*	e.g. MB *šeft-a l-axūya* 'I saw my brother' (lit 'I saw-him *l*-my brother')	*šəft axi/ axūyi*
Existential particle	*aku/ māku* 'there is/ is not'	*fīh/ mā fīh*
Indefinite article	e.g. *fad kitāb* 'a book'	*ktāb*
Genitive particle	e.g. *il-bēt māl-ak* 'your house'	*il-bēt tabaʿ-ak/ btāʿ-ak*

Table 2. *Some Features Shared by (almost) all Iraqi dialects (Holes 2019, p. 64)*

Holes (2019, p. 65) mentions that "Each of these 'Iraqi' features is also found in the dialects of one or other of Iraq's near neighbours, but taken together, this 'bundle' is uniquely Iraqi". A principal distinction within the Iraqi dialects, beyond these shared features, lies between the *gilit* group of dialects and the *qəltu* group.[24] Historically, Arabic linguists labeled the *gilit* dialects as *Bedouin* and the *qəltu* dialects as *sedentary*. These designations not only allude to linguistic features but also historically resonated with the respective lifestyles of their speakers. Notably, the relevance of this categorization has diminished over time. In contemporary Iraq, these dialectal distinctions roughly align with religious communities: *gilit* dialects are predominantly spoken by Muslims, while Christians and Jews, irrespective of their geographic location within Iraq, use *qəltu* dialects. Adding complexity to this dynamic, north of a line spanning Falluja on the Euphrates to Samarra on the Tigris, Muslim urbanites in cities like Tikrīt, ʿĀna, and Mosul employ *qəltu* dialects, like their Christian and Jewish fellow nationals. Against this, cities situated south of this demarcation, such as Baghdad and Basra, exhibit a 'communal' dialect divergence.

Here, Muslims predominantly converse in a *gilit* dialect that aligns with that of the neighboring rural areas, whereas Christians and Jews predominantly use a *qəltu* dialect throughout Iraq (Holes 2019, p. 65). In his article on the confessional varieties of Iraqi Arabic, Holes (2019, p. 66) summarizes the main differences between *qəltu* and *gilit* dialects, represented by Mosul and Muslim Baghdadi. The examples in Table 3 show that the differences affect basic phonology and morphology as well as core vocabulary.[25]

[24] This differentiation arises from the way their speakers pronounce the Arabic phrase meaning "I said".
[25] Blanc also observed differences in the consonant and vowel inventories among MB, CB, and JB dialects and noting that CB lacks interdentals. He highlighted the resemblance of the qiltu dialects to CB and JB in

	Mosul (all speakers)	*Muslim Baghdadi*	
q	*qāl*	*gāl*	'he said'
k (front vowels)	*kān*	*čān*	'he was'
(back vowels)	*ykūn*	*ykūn*	'he will be'
r	*ġāḥ*	*rāḥ*	'he went'
Vowel-raising:			
ā before *i/e*	*ǧēmeˁ*	*ǧāmeˁ*	'Friday mosque'
ā before *ī*	*bazīzīn*	*bzāzīn*	'cats'
final *-a*	*badli*	*badla*	'suit of clothes'
3msg pron. suffix:	*abū-nu*	*abū*	'his father'
Pattern 1 past stem:			
1sg	*katabtu*	*ktabet*	'I wrote'
3msg	*katab*	*ketab*	'he wrote'
3fsg	*katabet*	*ketbat*	'she wrote'
3pl	*katabu*	*ketbaw*	'they wrote'
Common adverbs:	*hōni*	*hnā*	'here'
	hnūka, hōnek	*hnāka*	'there'
	hākeḏ	*hīči*	'thus'

Table 3. *Linguistic Differences Between qəltu and gilit dialects Represented by Mosul and Muslim Baghdadi Arabic (Holes 2019, p. 66)*

4.1.2 Syrian Arabic

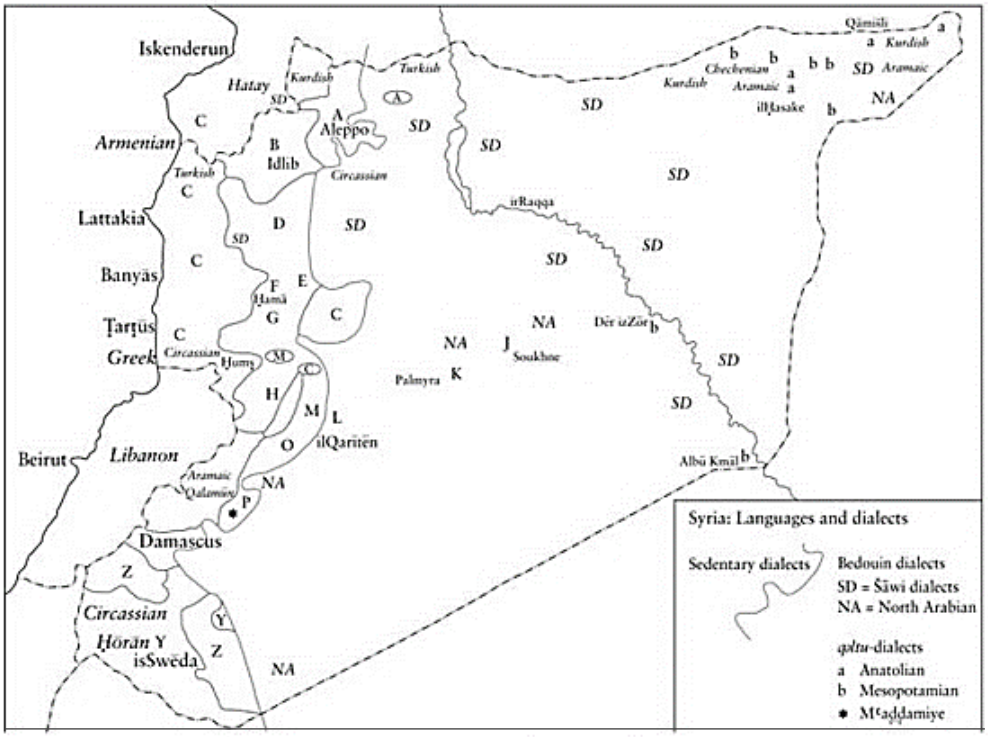
Arabic dialects in Syria can initially be categorized into two main groups: Sedentary and Bedouin dialects, as outlined by Behnstedt (2006, p. 403). The sedentary dialects are further categorized into several areas, including northern dialects (Aleppo and Idlib), dialects of the Syrian coast and coastal mountains, central dialects, dialects of Qalamūn, the dialect of Damascus, and dialects of Mount Hermon and Jabal id-Drūz (Behnstedt 2009). Bedouin dialects are prevalent in the central and eastern parts of Syria, extending from the northern Arabian Peninsula. The boundary between sedentary and Bedouin dialects runs east of a line connecting Aleppo, Hama, Homs, and Damascus. In the north, rural areas around Aleppo exhibit linguistic characteristics similar to the city itself. Furthermore, some speakers of Bedouin dialects incorporate urban features into their speech. In situations of

their use of a /q/ variant, as in SA. Blanc cites examples like /θqiːl/ for 'heavy' and /qahwa/ for 'coffee' from Anah and Hīt to support this observation (1964, p. 27).

dialectal contact, speakers tend to avoid using the most conspicuous or stigmatized features of their dialect (Behnstedt 2006, pp. 402–404).

Within these categories, two subgroups emerge: the Šāwī dialects, considered the oldest in the area, and the North Arabian dialects (Behnstedt 2006, p. 403). Additionally, certain dialects in the steppe and oases regions, as well as in the southwestern Horan region, exhibit a mixture of influences. The former display strong Bedouin dialect influences, while the latter are closely related to the rural dialects of Jordan and Palestine, with noticeable Bedouin features. In northeastern Syria, urban centers such as il-Ḥasake, Qāmišli, Dēr iz-Zōr, Albu Kamāl, and Khātūni are associated with Mesopotamian *qəltu* dialects, which have connections to Anatolian and Iraqi *qəltu* dialect groups (Behnstedt 2006, p. 407).

As the dialect of the capital city, Damascus Arabic is pretsigeful and is often used in radio and television programs. It can be described as a Syrian koinic dialect, characterized by its "neutral" qualities. Damascus Arabic is primarily a "Syro-Lebanese sedentary dialect", with differences mainly in vocabulary, observed among the Muslim, Christian, and now mostly expatriate Jewish communities (Lentin 2011, p. 546). Damascus Arabic has been the subject of study for over a century and is one of the most well-documented Arabic dialects. Significant scholarly contributions to the study of the Damascus Arabic dialect are found in the grammars by Grotzfeld (1965), Ambros (1977), and Cowell (2005). The dictionary by Stowasser and Ani (2004), offering English-Damascus Arabic translations, is particularly esteemed in the field. The following Map 1 illustrates the geographic spread of these languages and dialects across Syria:



Map 1. *Languages and Dialects in Syria (Behnstedt 2006, p. 405)*

The following Table 4 gives a summarized overview of the distinctive characteristics of each dialect area based on the research of Behnstedt (2006), Ramos (2019), and Cowell (2005). For further details, readers are encouraged to consult the works referenced.

Group A: Northern Dialects (Aleppo and Surroundings)

- Characterized by the use of a- prefix in the 1st person singular imperfect tense, differing from other sedentary dialects. Examples: *ašṛab* ('I drink') and *ašūf* ('I see')
- Phonetic features: *Imāla* is widespread, impacting the pronunciation of words like *sēfaṛ/ysēfer* ('to travel'), with both /q/ and /ʔ/ retained
- Cities/regions: Aleppo and its surrounding areas

Group B: Northern Group (Secondary)

- Group shows a prevalence of diphthongs in all positions and partial *Imāla* akin to that observed in Group A.
- Initial traces of *a-* elision (example: *ktab+t* becomes *katabt*), however, this pattern of elision does not uniformly apply across all forms; for instance, *katab+it* remains *katabit* in some localities
- Unique characteristics: introduction of /č/ from Turkish (which indicates historical linguistic influence)
- Cities/regions: includes parts of northern Syria, likely overlapping with some areas close to Group A

Group C: Coastal and Coastal Mountains

- Exhibits a maximum deviation in diphthong treatment compared to Northern dialects. Examples are /ē/ – /ay/ and /ō/ – /aw/ shifts like *bēt*/*bayti* (‘house/my house’) and *ṣōt*/*ṣawti* (‘voice/my voice’)
- Linguistic phenomena: features a mix of monophthongs in unsuffixed forms and diphthongs in suffixed ones, e.g. *baytna* (‘our house’), *ṣawtna* (‘our voice’). Phoneme mergers of *i and *u into /i/ in the north, traditional opposition maintained in the south
- Cities/regions: coastal cities such as Latakia and Tartus, extending into the coastal mountains

Group D: Central Dialects (North)

- Maintains feminine forms in the plural, showing less phonological change
- Examples: fewer instances of *a-* elisions and a general absence of *Imāla*
- Cities/regions: central regions, likely including areas around Homs and Hama

Group E-H: Central and Southern Dialects

- Show a variety of phonological and morphological forms, including merging of Bedouin and sedentary verbal endings (e.g. *gāḷam* × *qālo* > *qāla* ‘they said’) → Bedouin influence
- Phonetic traits: display analogical formations such as *yqūlu* > *yqūla* for the imperfect and *intu* > *inta* for the 2nd person plural pronoun
- Cities/regions: central to southern Syria, potentially including regions like Ṣōran and Ṭayybit ilImām

Group J-Q: Steppe Dialects

- Characterized by a continuum of unique features, including the conservation of the nominal scheme *katīr* (‘much’). Verbal morphology often follows the i-type, as seen in verbs like *ʔílbis* (‘I wear') and *ʔínsi* (‘I forget’)
- Examples: Dialects in areas like Soukhne show gradual transitions such as *lbīs* (*lbēs*) and *nsī* (*nsē*)
- Cities/regions: Soukhne, Palmyra, and other steppe regions

Group W: Vicinity of Damascus

- Less marked by dramatic features, maintaining plosives instead of interdentals, aligning closer to standard Damascus Arabic
- Examples: *hadunke* (‘those’), similar to the form used in Damascus
- Cities/regions: Suburbs and nearby areas of Damascus

Group Z: Southern most Dialects

- Close to Southern Lebanese dialects with unconditioned *Imāla* and strong preservation of interdentals
- Examples: distinct phonetic features (*j* ~ *ž*) and verb forms, such as 1st person singular imperfect *ašṛab* and *išṛab* (‘I drink’) → phonological influences from the surrounding areas)
- Cities/regions: Mount Hermon, northern Ḥōrān, and Jabal idDrūz

Table 4. *Overview of Distinctive Characteristics of Syrian Dialects*

Following the overview of various Syrian dialects, I will specifically focus on Damascus Arabic for this study, as the participants are primarily from Damascus. Known locally as "llahže ššaamiyye", this dialect is prevalent in Syria's capital and exhibits similarities with other urban varieties across western Syria, Palestine, and Lebanon, often considered together as a linguistic unit due to shared phonology, grammar, and vocabulary. Damascus Arabic is not only widely understood within Syria but also exerts considerable linguistic influence on neighboring regions like Lebanon, Jordan, and Palestine (Lentin 2011, p. 546).

Characterized by its heterogeneity, Damascus Arabic holds a prominent position in the Levantine[26] linguistic landscape. As a typical sedentary urban Levantine variety, it is commonly used in media and is easily comprehensible to speakers of various Arabic dialects throughout and beyond Syria (Lentin 2011, p. 546). The Levant's significant linguistic diversity results from centuries of linguistic contact, influenced by the presence of different civilizations, migrations, trade routes, and pilgrim caravans.

4.1.3 Linguistic Features of Iraqi Arabic and Syrian Arabic

Iraqi and Syrian Arabic exhibit substantial phonological, morphological, and lexical differences. These distinctive features provide fertile ground for my research. While I will not be able to delve into every individual example, I have selected representative features to offer a glimpse into the differences between the two varieties. These examples shed light on the core linguistic domains where significant differences exist, forming the basis for our investigation into mutual accommodation. Among others, only some of these distinctive features highlighted here will play a central role as variables in our later comprehensive analysis. The following features will be described:

[26] The Levant region, traditionally categorized as one of the five primary zones for Arabic dialects, encompasses countries such as Syria, Lebanon, Palestine, Jordan, and Israel. Additionally, this dialectal zone extends to include outlying dialects found in Hatay and Cilicia in southern Turkey, as well as the dialect spoken in the Cypriot village of Kormakitis (Ramos 2019, p. 508).

(a) Reflex of *q

(b) Reflex of *θ and*đ

(c) Reflex of *k

(d) Imperfect verb prefixes

(e) Questions words

(f) Other typical words

(a) Reflex of *q (voiceless uvular stop)

Qaaf (q) is often cited as one of the most extensively studied variable in Arabic sociolinguistics, receives considerable attention in Al-Wer and Herin's (2011) work. They emphasize its role in differentiating various dialects within Mashreqi Arabic. The variable's usage as a dialect marker is evident in terms like *'gilit* dialects' for Mesopotamian Arabic, employing the [g] variant, notably in Muslim Baghdadi. '*Qəltu* dialects' on the other hand, refer to dialects like Christian and Jewish Baghdadi that use the [q] variant.

Al-Wer and Herin (2011), however, point out that in certain dialects, like those in Damascus, Beirut, and Jerusalem, the variation in (q) usage leans more towards lexical borrowing from Standard Arabic rather than genuine dialectal variation. Taking Damascus as an example, the traditional dialect predominantly uses the glottal stop, with [q] appearing mainly in learned lexical items from standard Arabic in specific speech contexts. This lack of systematic variation between [ʔ] and [q] in everyday speech implies that in these instances, (q) does not function as a true linguistic variable. In contrast, Amman presents a different scenario. Here, (q) is a genuine variable, with the interchangeable use of [g] and [ʔ] variants in the same words, regardless of the speaker's original dialect. This linguistic phenomenon, as detailed by Abdel-Jawad (1981) and further confirmed by Al-Wer (2002), arises from the intermingling of different Levantine dialect speakers, coupled with substantial Palestinian migration to Amman, introducing the [ʔ] variant into the local dialect.

Transitioning to my own research, a significant phonological distinction between Iraqi Arabic and Syrian Arabic is observed in the realization of *q. In Iraqi Arabic, *q is typically realized as a voiced velar stop /g/, as seen in words like *gahwa* for 'coffee'. However, the /q/ sound is maintained in words borrowed from Standard Arabic, as exemplified in phrases like *ib-kull ha-l-qaḍaaya* ('in all these matters'). Some "native" words consistently

maintain /q/, examples are *buqa* (‘remain’, ‘continue’), *qira* ‘read’ and *qišab* (‘gossip’). In Syrian Arabic the reflex of *q is a glottal stop /ʔ/, as in *ʔahwa* (‘coffee’) (Owens and Young 2007, p. 7).

(b) reflex of *θ (voiceless interdental spirant), *đ (voiced interdental spirant)

In Iraqi Arabic, both *θ and *đ, the voiceless and voiced interdental fricatives respectively, are preserved as in Standard Arabic. This retention is reflected in various common words that are integral to everyday vocabulary (Owens and Young 2007, p. 2):

(1) *ma-ʕid-hum **θ**aqaafa*
‘They don't have any culture.’

(2) *mi**θ**il-ma gilit inta*
‘As you said.’

Examples of *đ (ð) voiced interdental fricative include (Owens and Young 2007, pp. 2–3):

(3) ***ð**iič il-fatra*
‘that time.’

(4) *i**ð**a niḥči*
‘if we speak’

In contrast to Iraqi Arabic, the sound *θ (θ) is rare in urban Syrian Arabic. Examples on-clude *θiqa* vs. *siqa* (‘trust’) and *θaqaafa* or *saqaafe* (‘culture’), that can be considered classicism, where it is generally replaceable by /s/ in less formal contexts. Nevertheless, certain rural dialects use /θ/ regularly, such as in the case of *θaani*, which would be realized as *taani* by urban Syrian Arabic speakers. Styles. (Cowell 2005, p. 3) On the other hand, the *đ (ð) sound is not used in urban Syrian Arabic. Examples include *haada* (‘this’) or *iza* (‘if’). Also in this case, /đ/ can instead be found in certain rural dialects where it cor-responds to the classical Arabic variant (*haađa* and ‘*iđa*), compared to urban Syrian Ara-bic, where it is realized with /d/ or /z/ (Cowell 2005, p. 3).

Owens (2023) discusses the phonological transition from *θ to s in specific “learned” words in both Levantine and Egyptian Arabic dialects. An example of this shift is the transformation of the word *θawra* (‘revolution’) into *sawra*. It is posited that this shift was

probably influenced by Turkish from the Ottoman era. In Cairene Arabic, this is exemplified by the pronunciation of *sawra* (‘revolution’) with [s], as opposed to *toor* (‘bull’), which is derived from *θ but pronounced with [t]. This change is thought to be prompted by the nonexistence of /θ/ in Turkish, an intention to maintain a distinction in learned words from the prevalent *θ → t shift observable in Cairene and Damascene Arabic, and due to the Ottoman Turkish tendency to convert Arabic *θ into /s/, as seen in words like *istis**n**a* (‘exception’) originating from **isti**θ**naa?*. Owens suggests that this phenomenon can be viewed as a specific example of a high (H) diglossic feature following a natural linguistic evolution (Owens 2023, p. 138)

Despite the potential significance of the interdentals *θ and *đ in Iraqi Arabic and Syrian Arabic for understanding accommodation and koineization hypotheses, these features will not be the focus of the forthcoming analysis.

(c) Reflex of *k (/k/ – plosive, velar, non-nasal, voiceless)

In Iraqi Arabic, the *k sound, represented by /k/ and characterized as a plosive, velar, non-nasal, voiceless consonant, undergoes an intriguing transformation. The Iraqi dialect introduces the distinctive sound /č/ (phonetically [tʃ]). This sound is prevalent in borrowed words, such as the Turkish loanword *čaakuuč* (‘hammer’). Al-Hattami (2010, p. 268) illustrates this point by noting that the voiceless velar plosive [k], as in [ʔɪħkɪ] (talk), is often replaced in the Iraqi dialect and other Mesopotamian dialects with the voiceless palato-alveolar affricate [ʧ] –rendering it [ʔɪħʧɪ]. Notably, this /č/ sound frequently takes the place of the Modern Standard /k/ك, particularly before or after a front vowel /i/ِ or a front variant of /a/ـَ or /aa/ ـَا. In Standard Arabic, the affricate sound /ʧ/ is absent. Furthermore, it extends its usage to all southern provinces of Iraq and parts of other provinces like Anbar, Saladin, and Mosel. The usage of /č/ in Iraqi Arabic, especially in the context of specific vowels, will be focused on further in section 6.2.2. In contrast, in Syrian Arabic, the sound (k) remains unchanged in words like *kalb* for (‘dog’) and *kaan* (‘was’).

Owens (2023) provides a comprehensive analysis of the *k > č/c split in Arabic, tracing its roots beyond the 13th century, as earlier suggested by Holes (1991, p. 666). Owens posits that this phonological shift was already in place during the time of Sibawaihi, pointing to evidence from a range of contemporary sources. He refers to studies like Seeger (2002) and Behnstedt and Woidich (2011) to illustrate the spread of this phonological

change across various Arabic dialects, including Khorasan Arabic in Iran and eastern Sharqiyya in Egypt. Owens notes that dialects such as Soukhne (Behnstedt 1994), Tlemcen, and northern Morocco's Jebli dialects (Heath 2002) demonstrate the unconditioned reflex of *k to /č/. Drawing on Cantineau (1960), Owens highlights the old, classical roots of these palatalized variants, which are also mentioned in traditional Arabic grammars. Cantineau regards the foundation of these palatalized variants as ancient and associates them with the kaškaša and kaskasa (see also Owens 2013b) concepts found in Classical Arabic grammars. From this perspective, the palatalization of *k can be understood as a fundamental part of the kaškaša complex.[27]

He observes a consistent shift of *k to /č/ in the context of front vowels across several Levantine dialects and in Soukhne, Syria. Owens proposes a two-phase historical process for this phonological development: an initial conditional shift from *k to *č, and subsequently, a broader, unconditioned shift from *k to č. Owens further delves into the historical demography of the dialects exhibiting this change. He suggests that early Arab migrations into areas like Khorasan and the Sharqiyya may have been instrumental in the spread of the [č] sound. The prevalence of this phonological feature in both pre-diasporic and post-diasporic Arabic suggests its origin within the Arabic homeland, possibly disseminating during the Arabic-Islamic expansion. This hypothesis is supported by Sibawaihi's work, which Owens interprets as including [č] and perhaps [ts] among the non-basic sounds, thereby affirming the early and widespread emergence of the *k > č/c split in Arabic dialects. The realization of *k by Iraqi speakers, who typically use /č/, will be a significant variable in our analysis and will be described in more detail with examples from the collected data in Section 6.2.2.

(d) Imperfect verb prefixes

The study of imperfect verb prefixes in Arabic dialects reveals significant linguistic variation. Probably the most extensive imperfective pre-verbal marker in Arabic has the form *b-* (see Al-Wer 2014). The prefix *b-* is a common future or indicative imperfect marker in

[27] Owens (2023, p. 65) discusses the linguistic phenomenon *kaškaša* and *kaskasa*, which denote the usage of the suffixes *-ik* and *-ič*, respectively. These suffixes are applied in the 2nd person feminine singular attached object pronoun. His overview includes the use of *-ič* [itš] across various dialects, such as in the Gulf, NW Yemen, Iraqi *gilit* dialects, the Jordanian and Syrian desert, central rural Palestinian, Soukne (Syria), Khorasan (Iran), Sharqiyya, Jijel, Tlemcan (Algeria), and Jabli (Morocco).

dialects from Damascus, Egypt, Nigeria, Najdi, the Gulf, Yemen and Uzbekistan. *b-* is absent in Classical Arabic, Iraq, Eastern Libyan Arabic, Anatolia, Tihama, North Africa, and Maltese. An example from Cairene Arabic includes for instance *b-yiktib* ('he writes'). However, *b-* is not the only pre-verbal marker in Arabic (Owens 2023, pp. 146–147). For instance, Moroccan dialects use *ka-* (Caubet 1993, p. 32), and Upper Egypt has variants like *ʕa-* and *ʕamma* (Behnstedt and Woidich 1985, pp. 219–221), all serving a similar indicative function. In contrast, some dialects, including those in Iraq, Eastern Libya, northern Tunisia lack any pre-verbal markers. The geographical spread of *b-* is non-contiguous, and Owens identifies three key reasons for focusing on it: its dual grammatical values presenting a historical challenge, the hypothesis of its parallel independent development, and its implications in Arabic historical linguistics, particularly regarding grammaticalization trajectories.

In comparing Iraqi and Syrian Arabic, the variations in imperfect verb prefixes become a focal point. Iraqi Arabic lacks an indicative prefix, as seen in *Ø-yiktib* 'he writes, will write' (no prefix), whereas (Damascus) Syrian Arabic uses the indicative prefix *b-*, as in *b-yəktob* ('he writes'). Additionally, the prefixes *da-* in Iraqi Arabic and *ʕam-* in Syrian Arabic do mark distinct uses of the imperfect verb. However, in Iraqi Arabic, *da-* indicates immediate relevance, for example, *da-yiktib* can imply an urgent or ongoing action like "Can't you see he's writing?" (see Section 6.2.1). On the other hand, in Syrian Arabic, *ʕam-* (see Section 6.3.2) is used to express present continuous or actuality, as seen in *ʕam-bəktəb*, meaning "he is writing (now)". These differences in the use of *da-* and *ʕam-* between Iraqi and Syrian Arabic will be further explored in the subsequent analysis of this thesis.

(c) Interrogative pronouns

The distinctive interrogative pronouns contribute to the distinct linguistic profiles of Iraqi Arabic and Syrian Arabic. While it is interesting to observe these differences, it is important to note that they will not be treated in the later analysis.[28] The following table gives

[28] This selection process focused on features that are most frequently occurring or exhibit potential frequency differences across the data set. This approach aims to prioritize features that might demonstrate significant variations or trends that are particularly informative for the study's objectives. It does not imply that features like interrogative pronouns are uninteresting or unimportant; rather, they fall outside the scope of this specific investigation due to the criteria set for feature selection based on frequency and variance.

an brief overview on the interrogative pronouns in Iraqi Arabic and Syrian Arabic based on the grammars by Erwin (2004, pp. 292–296) and Cowell (2005, pp. 566–577).

IRAQI ARABIC	SYRIAN ARABIC	
š-/ - eeš / šinu, šinuwwa	*šu/ eeš*	what?
šloon, šoon	*kiif /šloon*	how?
š-gadd/ čam	*ʔaddeeš/ kamm*	how much/many?
man/ minu	*miin*	who?
š-wakit	*ʔeemta*	when?
yaa	*ayy*	which?

Table 5. *Interrogative Prounouns in Iraqi and Syrian Arabic*

(e) Examples for other high frequency words

In addition to the distinctive interrogative pronouns, Iraqi Arabic and Syrian Arabic show notable lexical contrasts that further highlight their linguistic differences. These differences include high-frequency vocabulary used in everyday speech, contributing to the recognizable character of each dialect. Iraqi Arabic, in particular, has a set of unique lexical items that set it apart from most other Arabic varieties. The following examples occur frequently in my data and are supported by Erwin (2004) and Cowell (2005). One of these (‘with’) will be explored in greater variationist detail in 6.1.3.

IRAQI ARABIC	SYRIAN ARABIC	
hnaa/hnaane/hnaaya	*hoon*	here
hamm, hammeen	*kamaan*	also
hwaaya	*ktiir*	a lot, many
aku (neg. maaku)	*fii (neg. maafi)*	there is
wiyya	*maʕa*	with

Table 6. *Examples for Lexical Differences Between Iraqi and Syrian Arabic (from my data)*

Chapter 5: Methodology and Research Design

This study follows standard sociolinguistic variationist research practices, and preparation for fieldwork being guided by Tagliamonte's book (2006) *Analysing Sociolinguistic Variation*, an in-depth 'how to' guide for analysing language variation in social contexts. Nevertheless, it is important to consider that some methods may not always be feasible or appropriate for researchers. Heller et al. (2018, p. 87) stress to "look not only at the narratives themselves, but also at the conditions in which they are provided, for whom, and over the course of what kind of activity". Studying lesser-studied communities, such as the Arab community in Germany, presents unique community-specific challenges that require a critical reflection on traditional methods.

This chapter provides background information for understanding the methodological approach and research design of this study. It explains the processes of and tools used for data collection, processing and analysis. Section 5.1 discusses data collection methods, including sociolinguistic interviews, a pilot study, and the main data collection procedure, supplemented with initial and follow-up questionnaires. Section 5.2 explores the corpus and analysis, offering information about the corpus, the study's participants, and insights into Iraqi and Syrian speakers, who are central to this research. Moreover, it covers data processing, addressing aspects like annotation, the selection and description of variables (both dependent and independent), and statistical procedures, focusing on the Generalized Linear Mixed-Effect Model.

5.1 Data Collection Instruments and Procedure

This study is based on 20 individual one-on-one sociolinguistic interviews with Iraqi and Syrian speakers conducted between 2020 and 2021 in Bayreuth and Nuremberg, Bavaria during the pandemic (2020-2021). Each interview lasted approximately one hour. In addition, two group interviews were carried out involving the same speakers, where Iraqi and Syrian speakers were paired in groups of four for a recorded group conversation. To complement the interviews, demographic information and details about the respondents' backgrounds and environments were collected. Furthermore, questionnaires were used to gather data on the interviewees' linguistic behavior in situations of contact with speakers of other languages and dialects. The upcoming sections will describe the data collection

process, including the challenges faced during COVID-19 and its impact on the speech communities involved in the fieldwork.

Ongoing sociolinguistic investigations have revealed that language variation can be adequately captured not only by large samples but also by smaller ones, underscoring a key challenge for sociolinguists in collecting data that accurately represents a target population and ensuring its quality (Sankoff 1980, pp. 51–52). This raises the question of how to generalize findings from a small sample to the entire speech community. Sampling involves selecting individuals from the population for study. However, sociolinguistic research must carefully address the representativeness of these samples to draw valid conclusions about the larger community. Grafström and Schelin (2014, p. 279) suggest that an ideal sample represents the broader population, preserving all its diverse features in a condensed form. Thus, while research on a particular subgroup can offer insights about its linguistic patterns, these findings might not be generalizable to the entire population or community. To address this, sociolinguistic studies might use one of three primary sampling techniques: random sampling, stratified random sampling, or judgment sampling, depending on the study's specific goals and the community's characteristics under investigation. Additionally, random sampling often amplifies the observer's paradox since chosen participants are individually recorded by isolating them from their social networks (Milroy 1980, p. 41). He further mentions: "Since a single meeting with a stranger is not a particularly auspicious occasion on which to observe a large portion of a speaker's linguistic repertoire, the data obtained are often very sharply limited in their capacity to represent a wide range of speech styles" (Milroy 1980, p. 41).

In my study, individuals were selected based on predetermined criteria. Efforts were made to recruit participants from homogeneous dialectal regions in Iraq and Syria who have been residing in Germany since 2015. This consideration was made in light of the presence of Arabic-speaking migrants from various countries in Bayreuth and Nuremberg, where the data collection took place. Additionally, the sample consisted of ten Iraqi and ten Syrian speakers, with five individuals from each age group (18-26 years and 45-56 years), to ensure representation across different age groups. A balanced gender sample was also sought to maintain gender uniformity within the study. To record natural speech data from these speakers, a central method used was the sociolinguistic interview. This method will be elaborated in the following section.

5.1.1 The Sociolinguistic Interview

The sociolinguistic interview is widely regarded as a fundamental method for data collection in variationist sociolinguistics, often considered essential for fieldwork in this domain (Milroy 1980, p. 61; Schilling 2013, p. 7). This method typically involves a one-on-one conversation between the researcher and the participant. The approach in these interviews is to gradually progress from broad and general questions to those that are more specific and personal. By asking about selected topics, participants are encouraged to share narratives about their experiences. In this study they were for instance about life in Germany or their home country, refugee experiences, and personal reflections on friends, family, fears, and concerns. This strategy aims to elicit the speaker's 'natural' language use, as emphasized in Tagliamonte's work (2006, p. 38). The concept of the vernacular refers to a highly systematic form of language used when speakers are least conscious of their speech. According to Labov (1972b, pp. 112–113), the goal of a sociolinguistic interview is to elicit this vernacular speech, characterized by minimal attention to the act of speaking. This suggests that the less attention a speaker pays to their speech, the more likely they are to use vernacular features. Therefore, in sociolinguistic interviews, interviewers typically focus on personal topics and encourage storytelling. This approach contrasts with discussing a person's credentials, which tends to induce more self-conscious speech, as noted by (Feagin 2004, pp. 30–31). As the traditional Labovian sociolinguistic interview does not follow any strict schedule, regarding my own interviews, it is important to note that while participants were asked similar questions, the interview format was not uniformly structured. Instead, topics were predetermined beforehand and modified after the first interviews. Speakers were given the freedom to discuss specific subjects of interest without interruption.

5.1.1.1 The Observer's Paradox

From the interview process, a problem can arise which is the *observer's paradox*, a crucial challenge in empirical fieldwork, describes the dilemma researchers face when seeking to understand how people behave naturally, yet can only do so through observation (Meyerhoff 2006, pp. 42–43). The paradox lies in the fact that people often alter their typical speech patterns when they know they are being observed or recorded. Milroy (1980, p. 40)

notes that this paradox has led some researchers, particularly those not belonging to the speech community under study, to adjust the focus of their analysis. Researchers have since been developing various methods to lessen the impact of the observer's paradox, aiming to elicit more natural speech patterns in sociolinguistic interviews. These include strategies to minimize the influence of observation and the potential discomfort inherent in the research process. For instance, Milroy (1980, pp. 43–44) used a hybrid approach combining insider and outsider roles to overcome the observer's paradox. She positioned herself not as a researcher, but as a friend of a friend, becoming a second-order member of the community. By using social network techniques and interacting with potential informants over time, she enhanced the possibility of observing spontaneous interactions. Holes (1987), in his study on language variation in Bahrain, used assistants familiar with the informants' culture. He engaged teachers from a local illiteracy-eradication program to interview their illiterate students, training them to interact with village women whom he could not meet directly (Holes 1987, p. 25).

Al-Wer (2022, p. 13) acknowledges that completely eliminating the observer's paradox might be impractical but focuses on reducing its effects. For instance, she refers to strategies suggested by Labov to divert speakers' attention from the interview and recording process. One effective technique involves engaging speakers in narrating personal experiences. When emotionally involved, speakers tend to pay less attention to their speech, shifting to more casual forms of expression. This approach is popular as Labov's 'Danger of Death' question, which asks about life-threatening experiences to elicit emotional responses and, consequently, casual speech (Labov 1972b, p. 113). This method has been successful in prompting natural speech patterns in sociolinguistic research. In conducting my fieldwork, I adapted my approach to account for the unique challenges and sensitivities of interviewing migrants in Germany. Unlike Labov's (1972b) 'Danger of Death' question, which may not have been suitable given the potential trauma experienced by many of the participants, I focused on how the pandemic changed their lives and their experiences as migrants in Germany. This approach enabled me to explore emotional and sensitive issues while being mindful of the boundaries and the emotional impact on both the interviewees and myself as a researcher.

In my fieldwork, I adopted a methodology similar to that of Holes (1987) in his language variation research in Bahrain. Like Holes, who used culturally knowledgeable assistants to interview specific groups, I employed Iraqi and Syrian assistants familiar with

the community's cultural backgrounds.[29] This approach was essential in building trust, especially important during the COVID-19 pandemic. My assistants, being insiders, played a key role in minimizing the impact of my presence and facilitating a more natural interaction in the recording situations. These assistants, with whom I had established strong relationships, were helpful in introducing me to potential speakers. They introduced me not merely as a researcher but as a German-Iraqi individual deeply interested in Arabic dialects and spoken by migrants and their culture. In addition, shared discussions on topics like Arab food and music, significantly aided in building a relationship with the community. This strategy, mirroring Milroy's (1980), allowed me to adopt a hybrid role of an insider and outsider within the community, enabling me to navigate the observer's paradox effectively and create an environment conducive to spontaneous interactions. Moreover, conversations about education in Germany were beneficial. I helped with questions about life and difficulties in Germany and with job applications and letter translation, which were of great importance to many participants. This strategy of building trust, establishing common ground. During the individual interviews, I either left the assistants and informants alone or remained unobtrusively busy in the background to minimize my impact on their linguistic behavior. For the group conversations, I chose to stay with my Syrian assistant and the mixed groups of Iraqis and Syrians. This decision was made to maintain a balance between the number of Iraqi and Syrian individuals present. In order to foster a positive relationship and motivation in participating in my study, participants were compensated for their time and provided with formal confirmations acknowledging their contributions to the research.

5.1.1.2 Overcoming COVID-19 Barriers in Sociolinguistic Research

The data collection for this research was conducted within the challenging circumstances of the COVID-19 pandemic in the summer of 2020, a period marked by numerous restrictions and lockdowns. Initially, the selection process and observation of the participants was planned to be facilitated through personal contacts, and institutions such as the International Office (*Service Centre for Refugees & Integration*) at the University of Bayreuth,

[29] From my interactions with Arabic-speaking migrants, I noted a tendency among them, including Iraqis with whom I share a native dialect, to standardize their speech. To reduce the influence of my presence on the recordings, interviews were facilitated by assistants who are native speakers of the relevant dialects (Iraqi/Syrian) and insiders from the respective groups.

which serves as a service point for refugees and migration. Additionally, collaboration opportunities with the association for refugees, *Bunt statt Braun – Gemeinsam stark für Flüchtlinge e.V.*, in Bayreuth, and the *Amt für Kultur und Freizeit* (KUF) in Nuremberg were explored. However, pandemic-related restrictions led to the cancellation or limitation of events, significantly hindering access to potential participants and making fieldwork challenging. Key difficulties included tight timelines for conducting interviews and constraints on visiting locations for interviews, compounded by travel restrictions.

Despite these challenges, the assistants, who were also community insiders, facilitated data collection. Interviews were predominantly conducted in participants' homes, often accompanied by shared meals, fostering natural and in-depth conversations. The pandemic itself emerged as a relevant topic, motivating participants to share their experiences and stories related to the crisis. Therefore, conducting data during these extraordinary circumstances required flexibility, creativity, and adaptability (see also Neuhausen and Adnan 2024). Moreover, building close relationships was constrained by the restrictions, so I maintained contact with most participants through WhatsApp and phone calls, particularly when some of the participants needed support with translating letters or help with job applications. Following each other on social media channels also still plays a crucial role in maintaining and fostering long-term relationships.

In Nuremberg and Bayreuth, while there are many Arabs, they are still a minority. Finding speakers specifically from Baghdad and Damascus within the pre-defined age ranges and meeting additional selection criteria for a balanced sample in terms of gender and homogenous religious background, was in general challenging in some cases. This careful selection aimed to minimize the variable of different dialect origins when comparing older versus younger speakers and contrasting Iraqi and Syrian speakers, thereby ensuring group homogeneity.

5.1.1.3 My Role in the Field: The Iraqi-German Linguist's Perspective

During my fieldwork, I consistently kept a diary, where I documented my thoughts, reflections as well as observations after each interview. This practice allowed me to critically review and understand the distinct characteristics of each interaction. When I met the participants, I aimed to establish common ground and build trust by offering insights into how I grew up as a child with a migration background in Germany, while also navigating the

complexities of being seen as both familiar and foreign. Growing up in Germany after moving from Iraq at a young age placed me in a distinctive position during my fieldwork.

As a young woman raised in a small Bavarian town and with roots in Iraq, this background provided me with a unique perspective throughout the research process. In my case, like Henry (2003), I find myself navigating the dual identity of being both an insider and outsider within the Arabic community in Germany. Henry explores the blurred lines of belonging, recounting her own experiences of feeling out of place both in Canada and India despite her Pakistani heritage. She points out how such 'in-between' positions can significantly shape research outcomes, as the community's perception of the researcher affects the data collection process. Born in Iraq and raised in Germany, I possess what might be described as a "hybrid identity"[30]. Participants often perceived me as a hybrid figure - an Iraqi-German - which sparked their curiosity and led to deeper conversations. This unique perspective places me within the community while also setting me apart. Members often recognize my physical similarities but note differences in my accent or expressions, sometimes offering their own theories about these discrepancies.

This intersectionality of being Iraqi-German shaped the dynamics of my interactions with the participants. There was an initial assumption that, being raised in Germany, I might be disconnected from our shared cultural roots. This assumption prompted them to explain certain aspects of their culture, assuming I might be unfamiliar with them. To their surprise, I could converse fluently in Iraqi Arabic, which became a point of connection. They expressed concerns about language attrition among their children in Germany, a common challenge for immigrant families as they explained, and were keen to learn about my experiences with language maintenance. This was particularly relevant to many of the older speakers, who expressed a desire for their children to maintain their dialect despite prolonged living in Germany. Therefore, the first dialogues predominantly revolved around my personal journey, focusing on my upbringing in Germany and how I maintained my linguistic heritage. Personal topics, like marital status, often surfaced, reflecting the cultural norms and curiosities of the community.

[30] "Hybrid identities" are often described as intercultural, transcultural, or multicultural. Individuals with such identities may have dual or multiple national affiliations and are frequently labeled as bicultural or even trinational. They are commonly portrayed as either being caught "between two stools" or as "sitting on a third chair" (Badawia 2002). This framing is also relevant to fieldwork, as discussed by Neuhausen and Adnan (2024, pp. 136f.), who highlight the challenges of conducting research in Arabic-speaking communities in Germany, where complex identity positions – such as hybrid affiliations – can shape researcher-participant dynamics, trust, and access in the field.

When interacting with the Syrian group, the conversations usually started in German, as they initially perceived me as more German. This perspective also often led them to standardize their Arabic speech during our discussions. Access to this group was comparatively easier, partly due to less interest in my background and less suspicion or uncertainty as to my motives. On the other hand, interaction with the Iraqi group was initially more challenging due to a sense of mistrust. They posed many questions about the project and about me personally. However, the Iraqi assistant, who had already established a trust relationship with them, facilitated smoother interactions.

5.1.2 Pilot Study and actual Data Collection

Before starting the main phase of data collection for this research, I conducted a pilot study with one young and one old Iraqi speaker. This preliminary phase involved a smaller sample size and served as a preparatory step for the broader investigation (Al-Wer et al. 2022, p. 46). The main focus during the pilot study was to closely examine the social and linguistic variables that I had previously identified with the help of grammatical resources and a sociolinguistic profile of the speech communities. This initial study provided valuable insights and helped refine the methodology for the subsequent, more extensive data collection. In this section, I will not delve into the details of the pilot study but will instead highlight its key aspects and the role it played in shaping the methodology for data collection that followed.

During the pilot study, several aspects were carefully assessed and minor adjustments were made to enhance the overall quality of the subsequent interviews. A thorough microphone and technical check ensured optimal recording conditions, maintaining a natural and relaxed conversational atmosphere. It was observed that engaging in casual conversation before initiating the formal interview helped participants feel more comfortable, leading to more genuine and spontaneous discussions. As the pilot study involved both older and younger Iraqi speakers, it was evident that some questions needed to be tailored to specific age groups. Consequently, a few additional topics, particularly related to media usage, were incorporated into the interview guide to accommodate age-specific interests and perspectives. A notable finding from the pilot study was the participants' eagerness to discuss their experiences during the pandemic. Consequently, the interview protocol was adjusted to include more questions about the pandemic to encourage participants to share

their emotions and thoughts on this significant event. If an interviewee expressed strong emotions or passion about a particular topic, the conversation was allowed to linger on that subject.

Building on the insights gained from the pilot study, a decision was made to conduct group interviews separately for Syrian and Iraqi participants, dividing them based on gender. This approach aimed to create a more comfortable and open environment for the participants, fostering open and in-depth discussions within their respective gender groups. Overall, the pilot study served as an invaluable preparatory phase, highlighting the importance of fine-tuning the interview guide to address participants' unique characteristics and emotions.

Figure 3. *Data Collection Process Including Three Steps: Pilot Study, First and Second Data Collection Phases*

As mentioned in Section 5.1, it is not practical to test every member of a population in sociolinguistic research. Instead, I use a sample (see 5.2.2) that aims to reflect the broad characteristics of the entire population. This means the sample should ideally include a proportional representation of factors like age and gender to avoid biases. However, achieving such a balanced sample is challenging in reality. It is important for readers to understand that the sample in this study is not fully representative of the entire population. I will explore the implications of sample selection further in Section 5.2 and discuss how might affect the conclusions and interpretation of the research findings.

5.1.3 Initial and Follow-Up Questionnaires

In this phrase of the study I used two primary types of questionnaires (see Appendix B and D): one to gather general background information from participants and another for a more

in-depth understanding of their sociolinguistic interactions, both before and after their migration to Germany. Both these tools were essential for accumulating a multifaceted view of our participants' experiences and gaining more insight on their linguistic background.

5.1.3.1 Participant Profiles and Linguistic Details

The general information questionnaire served as a tool in capturing key details about the participants and their background (see Appendix B). It was designed in both Arabic and German, allowing the participants the flexibility to choose their preferred language for completion. This allowed for inclusivity and ensured ease of communication for all participants. The questionnaire asked for personal information, including birthplace and date, upbringing, family details (parents, spouse, and children), educational background, and occupation. Additionally, participants were asked about their language proficiency in both Arabic (Modern Standard Arabic) and German. Insights into their arrival in Germany, prior residencies, and attitudes toward different Arabic dialects (language attitudes) were also collected. Understanding participants' media usage patterns was important (mainly for future research), and thus, the questionnaire also delved into their media preferences. As the original plan included incorporating online data, inquiries related to online communication behavior, such as the applications (apps) or channels they utilize and their use of Arabizi (a form of Arabic written in Latin script), were also included.

Moreover, following each interview, assistants were asked to fill out a protocol if they observed anything noteworthy during the interview process which was discussed after the interviews. The utilization of the questionnaire, alongside meticulous recording and documentation, ensured the richness and depth of the data collected, significantly contributing to the success of the research.

5.1.3.2 Investigation of Participants' Linguistic Interactions

To deepen my understanding of the participants' experiences and linguistic trajectories, follow-up questionnaires (see Appendix D) were administered after the initial interviews. This was executed with the assistance of a native Iraqi for the Iraqi participant group and a native Syrian for the Syrian group, ensuring better rapport and cultural familiarity with the interviewees. The first set of questions focused on the participants' pre-migration experiences, particularly their interactions with other Arabic speakers in the cities where they had resided:

- **Cities of residence**: Participants were asked to list the Arabic-speaking cities they had lived in and for how long.
- **Arab demographics in previous cities**: Questions were aimed at identifying whether participants had interacted with Arabic-speaking people of other national origins in cities like Baghdad (for Syrians) or Damascus (for Iraqis). Respondents were also prompted to specify the nationalities of these people and how frequently they had contact specifically with Iraqis/Syrians.
- **Kind of relationships**: Participants were asked to describe the types of relationships they had with these individuals—whether they were friends, work colleagues, schoolmates, university classmates, or other.
- **Contact settings**: Lastly, participants were asked to mention the locations where they had met Iraqis, such as schools, workplaces, and social venues.

The second part of the questionnaire aimed to understand the networks the participants had after relocating to Germany:

- **Current interactions:** Participants were questioned about whether they currently had contact with Iraqis (for Syrians) or Syrians (for Iraqis) in Germany, the frequency of these interactions, and the nature of their relationships.
- **Communication and language:** Respondents were asked to describe the language used during these interactions and whether any difficulties were encountered in communication. They were given the option to elaborate on the reasons for any communication issues.

Finally, the questionnaire concluded by inquiring where else participants encountered the respective dialects – whether through family, friends, films, series, music, or social media. This post-interview inquiry was helpful for offering a deeper understanding of the sociolinguistic background and experiences each participant brings.

5.1.4 Ethical Considerations

In my study, it was essential to follow ethical standards when interacting with participants who provided the linguistic data for my study. Historically, ethical guidelines in sociolinguistics were less strict, and earlier fieldwork did not necessitate comprehensive disclosure of a project's objectives and purposes, unlike in recent times. This shift in ethical practice is noted by Tagliamonte (2006, p. 33). In the process of gathering my data, to ensure a careful approach, participants were introduced to me by the assistants in a manner that fostered a comfortable environment encouraging open conversation. They were thoroughly informed about the project's objectives, the interview procedures, and the handling of the data, emphasizing clarity and transparency. This approach aligns with the ethical guidelines outlined by Tagliamonte (2006, p. 33), which I followed during the data collection for informal interviews. These guidelines included obtaining explicit consent for audio recording, ensuring participant anonymity, guaranteeing voluntary participation, and providing access to both the researcher and the research findings. In compliance with these German regulations, participants were required to sign consent forms (see Appendix A). Although this was a mandatory practice, it sometimes led to suspicions among participants. Addressing these concerns, I dedicated time to explaining thoroughly the research process and purpose, ensuring that participants felt informed and comfortable. This not only followed the ethical standards but also reinforced the overall integrity and trustworthiness of the research methodology.

All recordings and questionnaires were anonymized to protect the participants' privacy, ensuring no names or identifying information were used. Instead, each participant was pseudonymized, receiving a new name for the purpose of this research. This commitment to privacy extends to all parts of the study, where all personal details have been coded. Participants were also informed about who was responsible for managing the study. To confirm their understanding and agreement, they signed a form before the start of the interview. With their consent securely documented, the interviews were conducted using a dgital recorder (reference to where you describe which on. In addition to the verbal discussions, participants filled out a questionnaire (see 5.1.3.1) in order to capture some personal information. After the interview, a follow-up questionnaire regarding their inter-Arabic dialectal interactions (5.1.3.2) was also provided. As already mentioned above, as a token of gratitude for their invaluable input and time, they received compensation.

5.2 Corpus and Analysis

The second part of the chapter presents the corpora and methods for data collection and analysis used in the present study. The following sections provide an overview of the data used, which includes criteria for speaker selection as well as demographic information for all participants. Methods used for data extraction and criteria for exclusions are outlined in Section 5.2.3.2. The following sections present the social and linguistic factors tested in the present study. Moreover, the approach and tools used for quantitative analysis will also be discussed.

5.2.1 Corpus Data Overview

The corpus consists of 22 interviews (20 one-on-one and two group interviews) involving 20 interviewees (excluding the two interviewers and myself). It encompasses around 22 hours of speech. The dataset is almost evenly split between Iraqi Arabic, with approximately 69,216 words, and Syrian Arabic, with about 62,299 words. This word count considers only the interviewees' contributions, not including the input from the interviewers or myself. The total corpus, including the interviewers' and my contributions, amounts to 202,358 words. In terms of detailed linguistic analysis, the Iraqi Arabic part of the corpus consists of 13,728 annotated tokens, while the Syrian Arabic corpus includes 11,466 annotated tokens. This dataset forms the basis of the analysis presented in this study and constitutes a substantial medium-sized corpus.

The table following Table 7 offers a summary of the oral data collected and the unique bilingual corpora developed for this study[31]. This research is among the first to specifically explore the mass migration communities from the Middle East to Germany, a significant and understudied demographic shift. The multilingual nature of the corpus adds unique and valuable aspect, enriching the study's contribution to the field of sociolinguistics.

[31]All participant names provided throughout this study are pseudonyms used to protect their privacy and confidentiality.

	Iraqi Arabic Corpus	***Syrian Arabic Corpus***	***Mixed corpus with Iraqi and Syrian Arabic***
Speakers/ spoken words	12 (10 participants; one active and one passive interviewer) Adam_YM: 7,061 Amira_YF : 8,730 Bilal_YM: 8,038 Dalia_YF: 6,607 Mahir_YM: 3,728 Munir_OM: 9,103 Sabiha_OF: 6,990 Samira_OF: 4,895 Safa_OF: 7,392 Ahmad_OM: 6,672 Interviewer: 32,982	12 (10 participants; one active and one passive interviewer) Yara_YF: 6,015 Huda_OF: 5,894 Jalal_OM: 5,430 Ashraf_YM: 7,449 Khalil_OM: 6,255 Asma_OF: 7,327 Shahad_YF: 4,482 Murad_OM: 6,586 Yasmin_YF: 5,430 Yahya_OM: 7,431 Interviewer: 14,864	10 (8 participants; one active and one passive interviewer) Adam_YM: 1,707 Amira_YF: 3,585 Sabiha_OF: 4,122 Munir_OM: 3,369 Yara_YF: 2,165 Ashraf_YM: 1,995 Huda_OF: 2,860 Jalal_OM: 3,194 Interviewer: 1,747
Words (total)	102,198	77,163	22,997
Words (without interviewers)	69,216	62,299	21,250

Table 7. *Overview of Iraqi and Syrian data*

5.2.2 Participants of the Study

Before introducing the participants in my study, I will first give an overview of the broader populations of Iraqi and Syrian migrants in Germany. Subsequently, I will give details of the participants involved in my research, providing insights into their backgrounds and linguistic profiles. This information is derived from both the questions posed during the interviews and the results obtained from the questionnaires.

Migration from Iraq has deep historical roots, closely intertwined with the country's history. Even before the onset of recent refugee crises, Iraqis had been migrating to Germany since the mid-1960s. While initial migration waves primarily consisted of student groups, subsequent decades saw an influx of refugees from various periods of political unrest and conflict within Iraq (Candan 2017, p. 5). Events such as the Iraq War in 2003 and subsequent internal conflicts, including the rise of the 'Islamic State' (IS) since 2013,

have contributed to significant migration flows (Candan 2017, p. 9). Often, Iraqis initially sought refuge in neighboring countries like Iran, Turkey, Jordan or Syria (until 2011), before resettling in Germany, Sweden, or the United Kingdom, among other popular destinations (Candan 2017, p. 9).

According to data from the *Foreigners' Central Register* (AZR), there were 281,340 Iraqi nationals and 972,460 Syrians residing in Germany in 2023, constituting a notable part of the country's immigrant population (Statista 2023)[32]. Iraqi migrants in Germany form a diverse group comprising various ethnic and linguistic backgrounds, including Arabic, Kurdish, Turkmen, Assyrian, Aramaic, Mandean, and Chaldean communities. While precise statistics regarding language distribution within the diaspora are unavailable, minority languages are presumed to be well-represented due to the persecution-driven political asylum claims made by these groups in Germany (Candan 2017, p. 12). Despite the territorial defeat of the IS, ongoing presence of active cells and militias persists, leading to continued displacement of millions of Iraqis. Since 2014, over six million individuals have been displaced by IS-related violence or fled conflicts between IS and Iraqi government forces, with over a million internally displaced persons remaining in Iraq. Additionally, approximately 260,000 refugees from Syria have sought shelter in Iraq (BMZ 2022)[33].

For Syrians, Germany has emerged as the primary destination within Europe. Syrian immigration to Germany has been shaped by various and sometimes overlapping forms of migration. Educational migration has historically been significant, with Syrians migrating to Germany for education and training purposes since the 1970s. Furthermore, periods of political upheaval, such as the 1980s uprising in Hama, led to the expulsion of opposition members seeking political asylum abroad, including in Germany (Hunger et al. 2017; Ragab et al. 2017). The flow in Syrian migration can be attributed to the ongoing civil war in Syria, which began in 2011 and has since resulted in widespread displacement and devastation. According to the United Nations, Syria was the world's largest source of refugees in 2021 (Statista 2024)[34].

[32] Statista (2024). Anzahl der Ausländer in Deutschland nach Herkunftsland am 31. Dezember 2023. URL: https://de.statista.com/statistik/daten/studie/1221/umfrage/anzahl-der-auslaender-in-deutschland-nach-herkunftsland/ [May 2024].

[33] Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (2023). Irak: Deutschland unterstützt Transformation, Reformen und Wiederaufbau. URL: https://www.bmz.de/de/laender/irak [May 2024].

[34] Statista (2024). Anzahl der Ausländer aus Syrien in Deutschland von 2011 bis 2023 URL: https://de.statista.com/statistik/daten/studie/463384/umfrage/auslaender-aus-syrien-in-deutschland/ [May 2024].

5.2.2.1 Iraqi Participants

In this sub-chapter, I focus on the demographic and linguistic characteristics of the Iraqi speakers participating in the study. The speakers are divided into two generational groups: the younger generation born between 1993-1998, with an average age of 23.6 years, and the older generation born between 1964-1977, with an average age of 51.2 years. It is important to note that these ages were recorded during the data collection period in 2020; when these speakers migrated to Germany in 2014/2015, they were approximately five years younger. The majority arrived in Germany in 2015, with the exception of Mahir and his mother Samira, who relocated a year earlier than the rest of the participants. Geographically, all participants, except for Ahmad, Amira, and Dalia – who are from the same family and were born in Diyala – defined themselves as originally from Baghdad. However, everyone grew up in Baghdad and resided in Nürnberg at the time of the interviews. The speakers largely come from similar neighborhoods in Baghdad[35], with three from *Al-Kadhimiya* (northern Baghdad), three from Al-Adhamiyah (east-central district), two from Al-Saidiyah in Southwest Baghdad, and one from Hayy Al-Jamiʕa (a neighborhood near the western Mansour district). The following map shows these districts:

***Map 2**. (Red) Marked districts of the Baghdadi participants (source: Google Maps)*

[35] Baghdad has nine administrative districts, each aligned with a district advisory council.

Linguistically, all participants speak Iraqi Arabic as their L1, predominantly speak Muslim Baghdadi Arabic and identify as Muslims. Most of the married Iraqi speakers are married to individuals also from Baghdad, and all have parents who originated and were raised in Iraq, specifically in Baghdad. Table 8 gives an overview of the participants:

Speaker	***Age***	***Gender***	***Place of birth***	***Education***	***German level***[36]	***Current Profession***	***Marital Status***
Mahir	21	M	Baghdad	Secondary Education	B1	Warehouse clerk	single
Amira	23	F	Diyala	High School, no diploma	B2	Vocational training	married
Adam	23	M	Baghdad	High School, no diploma	B2	Student	single
Dalia	25	F	Diyala	High School, no diploma	A2	Unemployed	married
Bilal	26	M	Baghdad	High school graduate	C1	Machine controller	single
Munir	43	M	Baghdad	Bachelor's degree	B2	Student	married
Safa	46	F	Baghdad	Bachelor's degree	A2	Saleswoman	divorced
Samira	55	F	Baghdad	Bachelor's degree	B1	Unemployed	married
Ahmad	56	M	Diyala	High school graduate	A1	Unemployed	married
Sabiha	56	F	Baghdad	High school graduate	A2	Unemployed	married

Table 8. *Social Characteristics of Iraqi Participants*

5.2.2.1.1 Pre-Migration Linguistic Interactions Among Iraqi Participants

In this section, I explore the pre-migration experiences of the Iraqi participants, particularly their interactions with speakers of other Arabic dialects before settling in Germany. Interestingly, 80% of the Iraqi speakers indicated that they had been in contact with Arabic-speaking individuals from various countries, including but not limited to Egypt, Syria, Saudi Arabia, Kuwait, Palestine, Jordan, and Sudan. The nature and frequency of these interactions varied significantly among the participants. For those who engaged nearly

[36] The *Common European Framework of Reference for Languages* (CEFR) categorizes language proficiency into six levels: A1 and A2 (basic user), B1 and B2 (independent user), and C1 and C2 (proficient user). A1 and A2 cover basic everyday expressions and phrases. B1 and B2 indicate the ability to understand and produce clear standard input on familiar topics and main ideas in complex texts. C1 and C2 represent a high level of proficiency, including understanding demanding texts and recognizing implicit meanings (Council of Europe 2020). While participants have officially attained these levels through official exams in German, it is important to note that their actual language skills may vary from these certified levels.

daily with speakers of other Arabic dialects, these interactions typically involved schoolmates, as was the case for the two youngest speakers in our study. For others, contacts occurred multiple times a week and usually involved friends or acquaintances met in various social settings such as supermarkets, restaurants, or through business interactions. Table 9 gives an overview of the countries in which the participants lived until the time of data collection:

Speaker	In Germany since	Stays before Germany
Mahir	2014	Syria (9 Years)
Amira	2015	Egypt (5 years), Syria (2 years)
Adam	2015	Turkey (2 years)
Dalia	2015	Syria (1 year)
Bilal	2015	Only in Iraq
Munir	2015	Syria (3 months), Emirates (3 years)
Safa	2015	Only in Iraq
Samira	2014	Syria (9 years)
Ahmad	2015	Egypt (5 years), Syria (2 years)
Sabiha	2015	Egypt (5 years), Syria (2 years)

Table 9. *Residence of Iraqi Participants in/before Germany*

5.2.2.1.2 Arabic Cross-Dialectal Interactions Among Iraqi Participants

In this section, the contact behavior and German language proficiency of the Iraqi participants while residing in Germany is examined. Remarkably consistent with their pre-migration experiences, 80% of the Iraqi participants in Germany maintain regular contact with Arabic-speaking individuals, mostly from Syria. A majority (80%) lives in areas with a high concentration of Arabic speakers, while the remaining participants reside in areas with few to no Arabic-speaking residents. When asked about their interactions with Syrians, 60% reported having daily or weekly contact, whereas 20% indicated infrequent or no contact. Those who do interact with Syrians generally describe these contacts as friends and/or schoolmates.

In terms of meeting locations, 60% mentioned supermarkets or shops in Nuremberg, 30% mentioned schools, and others identified various settings such as workplaces, shisha

bars, hairdressers, restaurants, gyms, or their own homes. Regarding the language of communication, all participants reported speaking Iraqi Arabic, with three indicating a "mixture of both dialects". Among younger speakers, German is frequently the language of choice in mixed groups that include Syrians and speakers of other languages. As for communication difficulties with Syrians, an overwhelming 90% reported no issues, while 10% noted occasional challenges. Beyond personal interactions, Iraqi participants also engage with Syrian Arabic through media: 90% regularly watch series in Syrian Arabic, 50% interact through social media, and 30% listen to Syrian Arabic music.

5.2.2.2 Syrian Participants

In this section, we turn our attention to the Syrian participants in the study, describing their demographic, linguistic, and social backgrounds. The younger generation among the Syrians was born between 1997 and 2001, with an average age of 20.6 years, while the older generation was born between 1972 and 1977, with an average age of 46 years. Notably, both age groups are younger than the Iraqi age groups. The ages mentioned pertain to the time of data collection in 2020, the speakers being about five years younger when they arrived in Germany between 2014 and 2015. In terms of migration timing, 50% arrived in Germany in 2015, with the remaining half coming in 2016, thus slightly later than the Iraqi participants. All Syrian participants were born and raised in Damascus and were residing in Bayreuth/Landkreis Bayreuth at the time of the interviews. They are L1 speakers of Damascene Arabic and are all Muslim. Marriage patterns reveal a clear Damascus-centric tendency, with all married Syrian participants having spouses from Damascus. One younger male participant was engaged to a Russian-speaking girl at the time of the interview. Similarly, the parents of all participants are also from Damascus. Table 10 gives an overview of the participants:

Speaker	***Age***	***Gender***	***Education***	***German level***	***Current Profession***	***Marital Status***
Shahad	19	F	Middle school qualification	B2	Student	single
Ashraf	19	M	Seconday school leaving certificate "Hauptschulabschluss"	B2	Vocational training	engaged
Yasmin	21	F	Middle school qualification	C1	Vocational training	single

Murad	21	M	Elementary school	A2	Pizza maker	single
Yara	23	F	High school graduate	B2	Student	single
Huda	43	F	6th grade	A2	housewife	married
Yahya	43	M	Seconday school leaving certificate "Hauptschulabschluss"	A2	unemployed	married
Khalil	46	M	Secondary school leaving certificate "Hauptschulabschluss"	A2	Butcher in Syrian Supermarket	married
Asma	47	F	Bachelor	B2	Arabic Teacher	married
Jalal	51	M	Elementary school	A2	Unemployed	married

Table 10. *Social Characteristics of Syrian Participants*

5.2.2.2.1 Pre-Migration Linguistic Interactions Among Syrian Participants

In this subsection, we examine the Syrian participants' pre-migration experiences and their interactions with other Arabic speakers both before and after relocating to Germany. Unlike their Iraqi counterparts, only 40% of the Syrian respondents had lived in other countries before coming to Germany, predominantly Arabic-speaking countries such as Egypt and Lebanon. The remaining 60% came to Germany directly from Syria. Half of the participants reported having contact with Arabic speakers from various countries including Iraq, Palestine, Lebanon, Egypt, and Saudi Arabia prior to their arrival in Germany. When asked about the frequency of their interactions specifically with Iraqis, 20% reported daily contact, another 20% had contact multiple times a week, while the remaining 60% had rare or no contact. In most instances, these contacts were schoolmates or work colleagues, followed by friends and neighbors. Common settings for these interactions were supermarkets, schools, and workplaces, although some also mentioned their homes and restaurants as sites of social contact.

5.2.2.2.2 Arabic Cross-Dialectal Interactions Among Syrian Participants

Upon their arrival in Germany, 90% of the Syrian respondents reported having contact with Iraqis. The intensity of these contacts varied, with the majority indicating sporadic interactions. Only one individual had daily contact due to working in a Syrian restaurant frequented by Iraqi customers. Other common settings for these interactions included schools, workplaces, supermarkets, and restaurants. Interestingly, only 30% of the Syrian participants lived in areas with a high concentration of Arabs, in contrast to 80% of the Iraqi participants. In terms of language, all respondents noted using Syrian Arabic during their interactions with Iraqis. However, two individuals mentioned employing a mix of dialects; one mentioned mixing Syrian, Egyptian, and German, while the other primarily used Syrian but incorporated known Iraqi terms. Unlike the Iraqi group, where 90% reported no difficulties in communication, 60% of Syrians noted encountering issues due to dialectal differences, often citing unintelligible Iraqi terms and difficulties in understanding the pronunciation of Iraqi Arabic as barriers. Despite the language barrier, a significant 70% of Syrians regularly listen to Iraqi music. Additionally, 30% are exposed to the Iraqi dialect through films or series, and 40% through social media. Table 11 gives an overview of the countries in which the participants lived until the data collection:

Speaker	In Germany since	Stays before Germany
Shahad	2016	Lebanon (1.5 years)
Ashraf	2016	Only Syria
Yasmin	2015	Egypt (4 years)
Murad	2016	Only Syria
Yara	2016	Lebanon (1.5 years)
Huda	2016	Only Syria
Yahya	2015	Only Syria
Khalil	2015	Only Syria
Asma	2015	Egypt (4 years)
Jalal	2015	Only Syria

Table 11. *Residence of Syrian Participants in/before Germany*

5.2.3 Data Processing and Preparation

For the interviews, I used a *Marantz PMD561* recording device coupled with a RØDE *NT2-A* external microphone (and a self-made microphone stand) to ensure optimal acoustic quality. To prepare the data for quantitative analysis, I followed a systematic approach. Initially, I transcribed the recordings using *Praat* (Boersma and Weenink 2023), with support from my Syrian assistant. After transcriptions were completed, I reviewed and corrected his transcriptions.

Before beginning the transcription process, my assistant underwent training to become familiar with the required techniques. Once transcribed in *Praat*, the audio files were converted into text documents. These text documents were then annotated using *Notepad++*[37]. Following the annotation phase, I used *CorpusCompass* (Adnan and Brandizzi 2023) to extract the annotated data from the text files. This data was subsequently automatically organized into a spreadsheet (.csv) format, which facilitated both descriptive and statistical analysis using the R programming language (R Core Team 2021). This clear, sequential workflow ensured the data was accurately processed and prepared for analysis.

However, the transcription process presented several challenges that need to be mentioned. Firstly, the absence of reliable speech recognition software for Arabic dialects required manual transcription, further complicated by the complexity and variation characteristics in the dialects. Additionally, the presence of overlapping speech in group conversations sometimes made it difficult to distinguish individual speakers accurately, leading to potential inaccuracies and made the process time-consuming. Moreover, certain topics discussed during transcription, such as violence and death, posed emotional challenges, so there was a need for sensitivity and empathy throughout the process.

5.2.3.1 Annotation

Linguistic annotation is a crucial step in language research, involving the systematic labeling and tagging of linguistic elements within a given corpus. As outlined by Al-Wer et al. (2022, p. 36), prior to analysing the data, it is essential to organize them in a manner conducive to easy reading, retrieval, and reference to the recordings. Furthermore,

[37] https://notepad-plus-plus.org/.

preparing the data for statistical modeling necessitates formatting them in a way compatible with specific statistical packages. In this study, the corpora underwent annotation using the *Notepad++* text editor. With a clear understanding of the linguistic features of interest, the annotation process involved identifying and marking relevant variables, including phonological, morphological, and lexical differences characteristic of Iraqi and Syrian Arabic.

Challenges arose throughout the annotation process due to various factors. The complexity of linguistic items, encompassing Iraqi, Syrian, German, English, and mixed forms, posed challenges. Additionally, resource constraints limited the annotation to a single annotator, potentially resulting in errors and inconsistencies. Extracting annotations into a structured dataset aimed to enhance variable selection for statistical analysis, yet this process required careful oversight. Limited programming skills presented further difficulties, although learning programming and developing analytical tools can mitigate such limitations (Gries 2009). Moreover, the need for new, flexible tools designed for under-resourced languages, as highlighted by Adnan and Brandizzi (2023), underscores the complexity of corpus creation and analysis, demanding a diverse range of technical and practical skills (Adler et al. 2024).

5.2.3.2 Data Extraction: CorpusCompass

Annotating data, especially in large amounts, can be time-consuming and prone to errors. These errors can significantly impact the accuracy of linguistic analyses. In the field of Corpus Linguistics, there is a growing emphasis on under-resourced languages and non-standard annotation tasks (Adler et al. 2024). However, traditional tools often struggle to meet the specific needs of linguistic researchers, particularly those working with spoken data, transcription, and annotation. This challenge is particularly prominent in sociolinguistics and variationist linguistics, where accurate annotations are crucial.

Despite the complexity of linguistic forms and their origin languages, I aimed for a comprehensive and precise extraction of annotations in spreadsheets for later statistical analysis. However, the diversity of languages within the corpora and the types of annotations created a need for a tool capable of handling such complexity. Although Corpus Linguistics offers a variety of tools with functions like KWIC concordance and word frequency counts, they often fall short for under-resourced languages such as Arabic.

Research methods often predominantly focus on monolingual, Western, Educated, Industrialized, Rich, and Democratic (WEIRD) communities – a tendency that also reflects in the advancement of modern technology and research tools (Neuhausen and Adnan 2024, p. 155).

To address these challenges, *CorpusCompass*[38] (Adnan and Brandizzi 2023) has been developed as an open-source tool designed for annotation extraction and dataset creation. It is currently undergoing user studies to improve its usability and accessibility. *CorpusCompass* specifically targets under-resourced languages and nonstandard annotations in mono- and multilingual corpora. It accommodates diverse workflows and data types while overcoming shortcomings found in existing tools. *CorpusCompass* enables researchers to define (dependent/independent) variables of interest, speakers within a corpus, and annotation rules. It prepares annotated texts for in-depth analysis on phonological, morphological, and lexical levels while ensuring error-free and consistent processing. Moreover, it generates structured datasets in .csv format from the pre-defined variables of interest and facilitates the corpus exploration and statistical analysis. Targeting researchers with varying technical proficiencies, *CorpusCompass* helps democratize linguistic data processing and analysis by enabling even those without programming skills to use it.
After completing the annotation process, I reviewed the token files. This process helped identify any coding errors that could potentially impact the subsequent statistical modeling phase. Moreover, *CorpusCompass* enabled the extraction and structuring of my datasets. To summarize the key features that supported my data processing and analysis:

- Tailoring annotation schemes and defining linguistic features to align with specific research goals
- Ensuring accuracy and consistency through error-checking to maintain data integrity while creating structured datasets from annotated texts.
- Facilitating data extraction of (normalized) frequencies and binary data in CSV files.

[38] *CorpusCompass* was developed in collaboration with Nicolo' Brandizzi (computer scientist from Sapienza University, Rome), who focused on its programming aspects. The project also received support from Dr. Jelke Bloem and the University of Amsterdam, particularly through the DSC 2023 *Research Engineering Support Grant* from the *UvA Data Science Centre* (DSC). Additionally, Arabistik Bayreuth and the *Deutsche Forschungsgemeinschaft* (DFG) provide financial support for the further development of the tool. Special thanks are extended to Jonas Adler and Carsten Scholle, students of Prof. Dr. Daniel Buschek (Chair of Mobile Intelligent User Interface), who contribute significantly to making *CorpusCompass* more accessible to users without a programming background by enhancing the user interface of the tool.

- Enabling data exploration to analyse correlations, dependencies, and the impact of social factors on language usage.

5.2.4 Variable Selection

The investigation of linguistic variation in Iraqi and Syrian Arabic encompassed a vast collection of phonological, morphological, and lexical differences, each representing distinct and characteristic features. In the preliminary stages, before embarking on the data annotation process, an extensive list of diverse linguistic features was compiled. This list includes age-specific elements and numerous discrepancies within core linguistic domains and provides opportunities to explore and document instances of mutual accommodation.

However, due to the breadth of the features under consideration, it was necessary to make a choice. Consequently, a focused approach was adopted, with particular attention directed towards a subset of high-frequency variables. These selected variables form the foundation for a corpus-based quantitative analysis, allowing for robust and meaningful insights into the observed linguistic patterns. While numerous interesting features were identified during the initial exploration, the decision to concentrate on specific high-frequency variables allows for a deeper and more focused exploration of the research question. At this point, *CorpusCompass* played an important role in providing an overview of annotated features and their respective frequencies. It enabled a careful selection, ensuring that the chosen variables are representative and yield meaningful contributions to the overall findings of this study. Additionally, I prioritized variables that are frequently used and show string differences between the two dialects to maximize the distinction, which in turn highlights stronger accommodation differences.

Table 12 provides an overview of the independent/ extra-linguistic variables associated with social factors that were considered for statistical analysis. Specifically, the table highlights three primary predictors: *gender*, *age*, and *conversational context*. For the variable *gender*, the levels include both *male* and *female*. Age is classified into two levels, which are *young* and *old*. The third variable, *context*, differentiates between *interview* and *group conversation*.

Predictor	*Levels*
Gender	male, female
Age	young, old
Context	interview, group onversation

Table 12. *Independent (Extra-Linguistic) Variables Included in Statistical Analyses of Dependent Variable)*

It turned out that *gender* was not a significant factor in this study. While gender has been included in the statistical analysis to explore potential areas of interest, detailed discussions on gender-related findings will be limited. Noteworthy gender differences will be mentioned only where they yield significant insights or contribute meaningfully to the analysis. *Age*, on the other hand, plays an important role. The study of young refugees presents a distinct linguistic perspective due to their experience of late second language acquisition often occurs without extensive familial reinforcement, leading to a reduced preservation of their heritage language and culture.

To explore linguistic change within this demographic, researchers employ an "apparent-time" study design, leveraging cross-generational comparisons to infer patterns of linguistic change (Labov 1972a; Tagliamonte 1998). The underlying hypothesis posits that the language practices of distinct age cohorts reflect various phases in the language's development, with age-related linguistic variances serving as markers of change over time. Adopting age as an analog for temporal progression is a common pragmatic choice in sociolinguistic research and offers immediate insights but also presents certain methodological challenges. By substituting real-time with apparent-time, this technique avoids the need to observe language change over many years. Instead, it relies on analysing samples from speakers across different age groups. Age is deemed a critical variable in this approach, yet other sociolinguistic factor, including social and stylistic influences and their interplay, also hold significance. These variables collectively contribute to linguistic usage and can reveal trends indicative of ongoing language change (Al-Wer et al. 2022, pp. 141–142). According to Bailey (2004, p. 329),

> "(…) the apparent-time construct has proven to be an excellent surrogate for real-time evidence, and the relative ease of collecting apparent-time data means that it will be used most often in research on language change in progress."

In instances where corpus data for essential populations are unavailable, researchers may choose to juxtaposing contemporary corpora with existing written grammars of the language. While this approach can fill gaps in data, it is not without drawbacks. Written grammars may be several generations outdated, such as the works used for Syrian and Iraqi Arabic, which are mainly over half a century old, and they often assume a uniform language variety. This aspect is also emphasized by Miller (2007, p. 3; footnote in original),

> "For a number of cities, we find relatively old dialect descriptions, which usually fail to account for variation and change. For others, we have more focused variationist studies, restricted to a small number of phonological variables.[1] Although valuable data have been collected for over a century, they are often not easily accessible. The absence of a synthesizing perspective does not facilitate cross-cultural comparison on the correlation between social changes and language changes."

Nonetheless, when the differences between the grammatical records and current corpus findings are starkly evident, as highlighted in Miller's study, they can offer a solid foundation for deducing linguistic change (Miller 2007).

In Table 13, the dependent linguistic variables that are the focus of the statistical analysis are outlined. The analysis is structured into two main categories: dialect-specific features and common linguistic traits. Dialect-specific attributes encompass elements like German loanwords, religious expressions, the prepositions *wiyya* and *maʕa* 'with', and the analytical genitive that exists in both varieties (*maal* in Iraqi Arabic and *tabaʕ* in Syrian Arabic). On the other hand, distinctive features unique to each dialect are examined, such as the prefix marker *da-* in Iraqi Arabic and the phoneme /č/ in Syrian Arabic. Additionally, distinctions like the presence or absence of the *-h-* suffix in the Syrian Arabic form *-hon/-ha* are examined.

	Iraqi Arabic Corpus	Syrian Arabic Corpus
Dialect-specific Features	▪ Prefix marker *da-* ▪ Phonemes /č/ vs. /k/	▪ *-h-* in Suffix pronoun *-hon/-ha* ▪ *ʕam-*
Common Features	▪ German borrowings ▪ Religious expressions ▪ Preposition 'with' *wiyya* and *maʕa* ▪ Analytic genitive (*maal* and *tabaʕ*)	

Table 13. *Selection of the Dependent Variables for the Quantitative Analysis*

5.2.5 Statistical Procedures and Hypotheses

The data sets on Iraqi and Syrian Arabic consist of a variety of dependent and independent variables, including binary (presence/absence) and count data types. *CorpusCompass* was used in generating these diverse data sets which were used for statistical analysis. In the following, the objectives of the statistical analysis and the hypotheses will be briefly outlined, followed by a discussion on the statistical model.

The primary objective of the statistical analysis is to investigate language variation in individual versus group interviews among Iraqi and Syrian migrants. Hypotheses were formulated regarding the relationship between age and the maintenance or reduction of specific linguistic features, with the expectation of younger speakers adopting new characteristics. Additionally, the research aims to determine if a shared dialect, a koine, could emerge from the linguistic contact between Iraqi and Syrian migrants. This involved first examining each group independently, followed by assessing their linguistic behaviors in a combined setting. The study also acknowledges the potential influence of prior koineization resulting from earlier interactions with other dialect groups. Here, specifically the question arises, whether migrants who had resided in other Arab countries exhibited linguistic differences compared to those who had not, with a focus on determining if such experiences constituted a significant factor in their language adaptation in Germany. Although this aspect will be described qualitatively, it will not be extensively covered in the quantitative analysis. Based on these aspects, this study proposes the following hypotheses, each designed to explore different facets of language variation and adaptation within these communities:

1. Intergenerational linguistic variation

The frequency of specific linguistic features will vary significantly across age groups, revealing patterns of linguistic maintenance or shift among Iraqi and Syrian migrants. Younger Iraqi and Syrian migrants will show linguistic features distinct from older generations. This would suggest an age-related change of language use within these communities. Individual differences among speakers will account for significant variations in language use, which may not be fully explained by age alone (random effects of individual variability).

2. Influence of conversational setting on language use (contact-induced change)

The linguistic behavior of Iraqi and Syrian migrants will differ between individual interviews and group discussions which indicates a context-dependent variation in language use. Both the Iraqis and Syrians will maintain their ancestral linguistic varieties to a high degree. Both groups will demonstrate a convergence of dialect features in mixed group settings (language accommodation), potentially leading to the formation of a common koine.

5.2.5.1 Generalized Linear Mixed Model (GLMM)

For the analysis of the data, Generalized Linear Mixed Models (GLMM) were computed in R (R Core Team 2021) using the package lme4 (Bates et al. 2015). The statistical output from all mixed models are included in Appendix E. Johnson (2009) posits that traditional regression analyses work under the assumption of independence among individual observations in a dataset, where each token of the dependent variable is treated as an independent observation. Over the years, there has been a noticeable shift within sociolinguistic research towards the utilization of mixed-effects regression models for data analysis (Drager and Hay 2012; Tagliamonte and Baayen 2012). This trend is motivated by the fact that a single speaker contributes multiple observations to the dataset and introduce variability that necessitates consideration in the statistical model (Tagliamonte and Baayen 2012). Overlooking addressing this variability can lead to an overemphasis on the significance of extralinguistic effects in regression output and potentially yielding statistically significant findings that are probably influenced by both individual variation and chance (Johnson 2009).

Mixed-effects models make a distinction between two types of predictor that can affect a dependent variable. Firstly, fixed effects are predictors that are replicable in another study, for example, speaker age (young/old) and gender (male/female) and context (individual interview/group interview) which are the variables of interest in my study. Random effects, by contrast, represent predictors sampled from a broader population and thus cannot be fully replicated (Johnson 2009, p. 365), such as the individual speakers in my study. According to Johnson (2009, p. 365),

> "These are usually not replicable – two studies of the same linguistic phenomenon might both involve men and women, but probably not the same individuals. For random effects, accounting for the variation in the population is more important than knowing the exact values of individual effects (although these are also estimated). For a fixed effect like gender, the mixed model gives the familiar set of coefficients associated with the differences between factor levels. For a random effect like speaker, it estimates a single parameter representing the amount of inter-speaker variation."

In contrast to standard regression models, which attribute fixed parameters to each speaker, mixed models account for variability by considering speaker-specific random effects. They register external influences only when these effects clearly exceed individual variation. When variation across speakers is substantial, the model adjusts to avoid mistaking random patterns for meaningful external effects. Incorporating a random effect for speakers in the regression analysis acknowledges that some individuals may favor a particular linguistic outcome while others may not (Johnson 2009, p. 365).

My dataset contained two distinct types of data: discrete (or count) variables, such as the number of German borrowings, and binary variables, which indicate yes/no situations, like the presence or absence of specific sounds, (for instance /č/ vs. /k/). The need to accurately interpret these varied types of linguistic data led me to make precise adjustments to my analytical model. For the discrete variables, including the analysis of occurrences like German loanwords, I used the poisson distribution, which is particularly suited for count data. This kind of data includes observations that are counted in whole numbers and do not have an upper limit, differentiating them from variables that represent percentages or fixed proportions. When it came to binary variables, I adapted the model to include a mixed model with a binomial family. This approach allowed me to analyse data that fall

into two categories (yes/no), offering a framework to model the probability of each binary outcome occurring.

In the initial phase of my analysis, I wanted to uncover the linguistic differences across generations, incorporating age, gender, and conversational context as fixed effects and random effects (speaker variation) within the mixed model, thereby providing insights into how these factors collectively influence linguistic usage within the Iraqi and Syrian group. The inclusion of random effects is, as already mentioned, particularly necessary for capturing individual differences and identifying outlier speakers, whose atypical linguistic patterns can offer deep insights into personal behaviors and broader community trends. The two groups were treated separately. The model specification was as follows:

$$\text{dependent variables} \sim \text{age} + \text{gender} + \text{context} + (1|\text{speaker})$$ [39]

- (Iraqi/Syrian) dependent variables represent the outcome measures of interest, including the defined variables (see Section 5.2.4) used by the Iraqi/Syrian group.
- age, gender, and context are treated as fixed effects. These independent/ extra-linguistic variables are used to examine the impact of generational differences, gender distinctions, and the influence of the conversational setting on the linguistic outcomes, respectively.[40]
- (1|Speaker) denotes a random effect for individual speakers to account for intra-speaker variability. This component allows the model to consider variations among speakers, acknowledging that each speaker may have a unique influence on the dependent variables.

In the subsequent phase of my analysis that aimed at addressing the second research question concerning the dynamics of speaker behavior within mixed-group interactions (involving both Iraqis and Syrians), I refined my model to focus exclusively on the participants engaged in these mixed-group conversations. This adjustment necessitated the inclusion of the same dependent variables as before, yet with a narrowed scope to only

[39] This means, that the dependent variables in the statistical model are influenced by factors such as age, gender, and context of speech. Additionally, the model accounts for variation between individual speakers as discussed in 5.2.5.1.

[40] The initial assumption (null hypothesis) is that the fixed factors have no significant impact on the outcome variable. If the resulting p-value is at or below 0.05, it can be concluded that the fixed factor term does have a significant effect on the response.

encompass those speakers who contributed to the group conversations. It is important to note that not all individuals who participated in the one-on-one interviews were also involved in these mixed-group discussions. Specifically, a subset of eight participants, who took part in both types of conversational settings, were selected for this focused examination. This approach enabled a direct comparison between the linguistic behaviors exhibited in one-on-one interviews and in group conversations. By concentrating on the same speakers within these distinct interactional settings, I could observe how their use of language shifted from the personal exchanges to the collective dialogue, uncovering the adaptive characteristics of linguistic expression across different social contexts.

5.2.5.2 Model Selection and Evaluation

In my analysis, I evaluated the normality of the data and focused on key aspects such as the homogeneity of variance and the presence of heteroscedasticity which will be briefly explained in the following. Additionally, I investigated the potential issue of collinearity among predictors, ensuring the integrity and reliability of my findings. This examination also included a comparative analysis with various models, the details of which will be elaborated upon in the subsequent sections (see Appendix E for the outcomes).

An important element of my evaluation is the use of the R-squared (R^2) statistic, which indicates the proportion of variance in the dependent variable explained by the independent variables, with possible values ranging from 0 to 1. This measurement reflects how much of the variation is explained by the model. A higher R^2 suggests a more robust model, though a value around 0.35 is still considered acceptable for reliability. When R^2 drops below 0.1, it indicates the model has limited explanatory power, prompting the exploration of alternative models (Al-Wer et al. 2022, p. 41). The R^2 values provided in Appendix E summarize the predictive ability of the fixed effects alone (*marginal* R^2), and calculate also the *conditional* R^2 to include the variance explained by the whole model with both fixed and random effects (Nakagawa and Schielzeth 2013). In my analysis, the conditional R^2 consistently outperformed the marginal R^2, indicating that accounting for variation among speakers is crucial and that including random effects in the model enhances its predictive capacity. However, it has to be noted that for the variable *wiyya*/ *maʕa*, there was no variation (conditional R^2), as our focus was on whether speakers favored *maʕa* over

wiyya in group settings and it was assumed that other factors, such as age and gender, do not play a major role.

Regarding model selection, I followed a structured approach outlined by Gries (2021), beginning with the formulation of an initial model to define predictor–response relationships. The process begins with the formulation of an initial model to define the structure of predictor/response relationships. In the context of my study, I followed Gries' framework for model selection, which involves defining the predictor-response relationships within an initial model. This initial step necessitated essential decisions, such as whether to assess a single model based on predefined hypotheses or to engage in model selection to identify the most appropriate model from a pool of candidates. Once I selected a model and confirmed its suitability through evaluation, I applied it to analyse each variable under investigation. The selection criteria, including p-values and information criteria like AIC (Akaike Information Criterion), play an important role in this process (Gries 2021, p. 362). The model with the lower AIC score is generally preferred, assuming all other factors are equal. This methodical approach to model selection emphasizes the importance of iterative testing and comparison to achieve the most accurate and reliable model configuration (Gries 2021, pp. 365–366).

Efforts to validate the effectiveness and accuracy of the model were guided by Gries (2021, p. 347). He suggests beginning with a null model, which is essentially a basic model that includes only an overall intercept and no predictors. This process allows for a critical comparison between the null model and the more detailed model (including all predictors) in question through *Analysis of Variance* (ANOVA). The fundamental aim of employing the null models is to investigate the possibility of observed patterns emerging by chance. Moreover, undertaking thorough model diagnostics was important to ensure that the selected model, whether it was the original or a revised version, followed to the critical assumptions required for both fixed- and mixed-effects regression models. This involved a careful examination of factors such as the distribution of residuals and the risk of multicollinearity among predictors. These steps were essential to affirm the model's robustness and appropriateness for the intended statistical analysis.

Concerning multicollinearity, it was important to ensure that the predictors in the model do not show significant correlation with each other. Multicollinearity occurs when two or more predictors in a model are correlated, leading to a situation where the variability explained by each predictor overlaps. This overlap makes it difficult to distinguish the unique contribution of each predictor to the response variable because they share part of

the variability. To determine if multicollinearity is an issue in my analysis, I used variance inflation factors (VIFs), which quantify how much the variance of an estimated regression coefficient increases because of collinearity. Gries (2021, p. 296) emphasizes the challenges posed by correlated or collinear predictors, noting their capacity to make models unstable and difficult to interpret. He warns that models containing several highly collinear predictors may experience drastic shifts in the effect size, direction, and p-values of other predictors, even with minor modifications such as dropping one of numerous predictors. If the VIF value for a predictor is significantly high (often a value greater than 10 is used as a threshold), it suggests that the predictor is highly correlated with other predictors in the model, indicating a multicollinearity problem (Montgomery et al. 2012). However, the VIF values for each variable in my study are low (close to 1), which indicates that there is no substantial collinearity among the predictors and each predictor contributes uniquely to the model.

5.2.5.3 Importance of Normalized Frequencies

In situations where languages come into contact, the data presents a remarkable degree of heterogeneity and shows significant challenges for comparative analysis across different corpora of speakers. As explained by Brezina (2018, p. 42), the simplest form of statistical measurement is the absolute frequency (AF), which counts the number of times a specific word appears in a corpus. While absolute frequency provides valuable insights for single corpus analyses, comparing data across various subsets requires a more nuanced approach. For meaningful quantitative comparisons, it is essential to count and contrast data. To achieve comparability among diverse and sometimes uneven data sets, it is necessary to use relative values fixed to a common reference point. This process, known as data normalization, allows for the alignment and comparison of data from different sub-corpora by adjusting them against a uniform standard, as discussed by Bubenhofer (2009, p. 150). This method ensures that even heterogeneous data can be effectively compared and analysed.

Despite the mixed-effects model's capacity to accommodate variability among speakers, including differences in the word counts they produce, the necessity of employing normalized frequencies becomes essential, particularly for descriptive analysis of each variable. These differences are especially noticeable when comparing my Syrian and Iraqi

speakers across different age groups or conversational contexts, given the substantial variation in their spoken word counts. To effectively address this issue, normalization of the data is necessary. The objective of normalization is to mitigate variations arising from factors such as differing speech rates or word counts among individuals, thereby retaining only those variations that hold sociolinguistic significance. Therefore, in order to conduct comparative analyses across the multiple corpora I had (particularly the ones from language-contact situations), the method of "relative (or normalized) frequency" (Brezina 2018, p. 43) was applied.

This approach involves adjusting the occurrence of certain linguistic features (like words or sounds) to a common/standardized scale for comparison and enabling comparisons across corpora of varying sizes. By normalizing these frequencies, typically to rates per 1,000 or 10,000 words, we gain the ability to effectively compare linguistic usage across different data sets. The process requires knowledge of both the absolute frequency of the linguistic feature of interest and the total word count (tokens) within the corpus. If we have collected data on the frequency of certain linguistic features, for instance the use of words or phrases from different groups of speakers, these groups may not have spoken the same amount of words, making direct comparisons challenging. To address this, we use normalization. Here is a simple formula for normalization:

$$\text{Normalized Frequency} = \left(\frac{\text{Occurrences of Feature}}{\text{Total Word Count}}\right) \times \text{Normalization Factor}$$

For instance, if we are normalizing to a rate per 10,000 words, and a linguistic feature occurs 50 times in a sample of 25,000 words, the calculation would be:

$$\text{Normalized Frequency} = \left(\frac{50}{25{,}000}\right) \times 10{,}000 \;=\; 20$$

This means that, adjusted to a standard scale of 10,000 words[41], the feature occurs at a frequency of 20. By applying this formula to all groups or data sets, we ensure that the frequencies are on a comparable scale, allowing for a fair comparison regardless of the original word count in each sample. In the analysis (Chapter 6), only normalized frequencies are used in order ensure comparability across different speaker groups. Since the total

[41] Depending on the size of corpus, normalizsation per 1,000 or 10,000 words are appropriate. For instance, in smaller corpora, smaller bases for normalization that one million are more appropriate (Brezina 2018, p. 43).

number of words spoken varies considerably between the Syrian and Iraqi participants, as well as across different conversational contexts, relying on absolute frequencies could over- or underweight relevant variables. An overview of the total number of spoken words per speaker is provided in Table 7 (Section 5.2.1). The underlying raw frequency counts for each linguistic feature can be found in Appendix E.

Chapter 6: Quantitative Analysis of Language Variation Among Syrian and Iraqi Speakers in Germany

The richness of the data opens up several avenues for further exploration. At this stage, it is worth revisiting the concept of the "founder effect" introduced by Mufwene (1996; see section 2.2.2), which, although originally developed in the context of creole formation, has implications that extend well beyond its initial scope. This concept gave rise to the idea of a "feature pool" signifying that when different varieties come into contact, they bring forth distinct sets of linguistic features. Within this feature pool, choices of variants are made, shaped by the inherent contrasts in paradigmatic and syntagmatic sets. As Mufwene (1996, p. 114) describes it, these are "new, disjunctive pools of features competing for selection into the developing creoles' systems". Even when excluding the term "creole" from consideration, the overarching idea persists: in language contact situations, the clash of contrasting linguistic features compels a forced choice among variants. This concept is highly relevant to the upcoming analysis as it offers a valuable lens for interpreting the complexities within the linguistic data. Specifically, in the context of Syrian and Iraqi speakers in Germany, applying the feature pool concept aids in identifying which competing variants might be candidates for koineization. This perspective is instrumental in analysing how speakers select among available linguistic options. By understanding that speakers are making choices among competing variants, patterns of language variation and change can be better analysed. With the concept of ESA by Mitchell (1986), these two frameworks help explain not only what features are available for selection, but why some are preferred and others avoided.

Theoretical discussions have highlighted several unique characteristics of the variables in question. However, in this chapter, I will concentrate on a selection of a few features. This focus stems from the primary aim of this work, which is to investigate whether there are discernible differences in the use of these features across generations and in various linguistic contexts.

In the following, the findings of this study will be presented. Quantitative analyses have been used in order to compare frequencies between different groups. All outcomes of the statistical analysis can be found in Appendix F. The chapter is structured in four parts, starting with the features that the Iraqi and Syrian group have in common and dealing with the groups independently afterwards. After each section, a brief summary and

discussion of the results will be provided. In the end of the chapter, I will discuss the findings considering broader aspects in the field of language variation and contact-induced change.

6.1 Shared Features: Sociolinguistic Variation among Iraqi and Syrian Speech Communities

In this sub-chapter, I turn the attention to the common sociolinguistic features that characterize both Iraqi and Syrian speech communities. These features are common to each but different in their realizations and include German borrowings, religious expressions, the preposition "with" (*wiyya* in Iraqi Arabic and *maʕa* in Syrian Arabic), and the analytic genitive (*maal* in Iraqi Arabic and *tabaʕ* in Syrian Arabic). Each sub-section begins with an overview of the linguistic feature, complemented by examples from the Iraqi and Syrian corpora. This is followed by a statistical analysis, which leads to a brief interim conclusion presenting the principal observations. Throughout, the emphasis remains on examining language variation across generations and the linguistic outcomes arising from language contact.

Before applying GLMMs, I provide a descriptive analysis of each variable to examine frequency distributions, particularly focusing on differences between younger and older speakers, as well as differences between one-on-one and group interactions. This initial descriptive exploration laid the groundwork for addressing the initial hypotheses concerning linguistic accommodation. In this phase, the normalized frequencies extracted from the CSV file generated by *CorpusCompass* were used (see Section 5.2.3.2). Subsequently, the following section explains the mixed-effects models applied to both categorical and count variables of Iraqi Arabic and Syrian Arabic.

6.1.1 German Borrowings

Starting with an analysis of German borrowings, this sub-chapter focuses on their significant role within the Arabic diaspora as evidenced in my thesis research. Given their prominence, this section will explore these linguistic elements in greater depth compared to other aspects of the study. It is worth mentioning that the phenomenon of Code-Switching (CS) was also observed in my data, particularly in group discussions among younger

speakers.[42] However, since it falls outside the scope of this analysis, further details on it will not be provided. Therefore, in the following section, I will briefly explain this distinction, with a particular emphasis on lexical borrowings after giving a general overview of CS.

A number of studies have described the dynamics of CS between German and other languages (Auer 1984; Di Luzio 1984; Hinnekamp 2000). Within the field of language contact, there is an ongoing debate about distinguishing between two phenomena: the incorporation of foreign material into the vocabulary of a contact language and the act of CS between two languages. CS is commonly described as a linguistic or discourse activity where elements from two or more language systems or codes, whether they are separate languages or different varieties of a single language, are incorporated within the same communicative act or interaction (Mejdell 2006, p. 414). Muysken (2000, p. 3) categorizes code-mixing into three distinct types: *insertion*, *alternation*, and *congruent lexicalization*. They elaborate on these processes as follows: *Insertion* involves incorporating lexical items or whole phrases from one language into the grammatical framework of another. *Alternation* refers to switching between mainly syntactic structures from different languages. *Congruent lexicalization* occurs when elements from various lexical inventories are integrated into a shared grammatical structure. He notes that these types are influenced by specific bilingual contexts, which account for the observed variability in mixing patterns. From a sociolinguistic perspective, the term *code-switching* designates socially significant shifts in code during conversational interactions.

Numerous scholarly works (e.g. van Hout and Muysken 1994) establish a distinction between CS and borrowing, especially in the context of individual lexical items. Typically, the criteria in literature characterizing borrowings include the use of a foreign lexeme, observed even in the discourse of monolingual speakers, usually to fill a lexical gap when a term does not exist for a particular item or concept in the borrowing language. Compared to CS, borrowing introduces or replaces words in the recipient language's lexical repository. Integrating this with Poplack's (2018, p. 6) perspective, borrowing is described as "the process of transferring or incorporating lexical items originating from one language into discourse of another". The main aspect for classifying a word as a borrowing is its morpho-syntactic assimilation into the recipient language. Therefore, a word is recognized as a borrowing when it adopts affixes from the recipient language and conforms to its

[42] Moreover, English and French borrowings were used by the participants.

syntactic rules (Poplack 1980). Such borrowings integrate in single words, parts of sentences, or whole phrases from a second language (L2) into the discourse of the primary language (L1), generally undergoing adjustments to align with the recipient language's patterns (Hasselmo 1969; Poplack and Sankoff 1984; Riehl 2005). The grammar of the recipient language might engage actively when borrowing, allowing borrowings to integrate at morpho-syntactic, phonological, or semantic levels. However, this integration is not a prerequisite for words to be assimilated into a language, evident from the numerous unaltered forms found in mixed speech (see Budzhak-Jones and Poplack 1997; Muysken 2000; Owens 2005a). It is widely noted that nouns dominate lexical insertions in codeswitching, as highlighted by Backus (1992, p. 47) and Myers-Scotton (1998, p. 104).

CS differs from the concept of borrowing, as it involves "two grammars and vocabularies are used in producing a sentence or a text" (Muysken 2000, p. 70). In contrast to borrowing, which merely pertains to the incorporation of lexical elements from one language into another's lexicon (Muysken 2000, p. 70). Haspelmath (2009, p. 36) defines loanwords (or also called lexical borrowing in the literature) "as a word that at some point in the history of a language entered its lexicon as a result of borrowing (or transfer, or copying)".[43] He clarifies that the term *borrowing* is used in two distinct ways: on the one hand, broadly, to encompass all types of transfer or copying, whether these involve native speakers incorporating elements from other languages into the recipient language. On the other hand, non-native speakers introducing aspects of their native language into the recipient language. This broader definition is the more commonly accepted usage of the term *borrowing* (Haspelmath (2009, p. 36). Furthermore, Callahan (2004, p. 5) outlines structure, frequency, and discourse function as the three main criteria for differentiating between CS and borrowing. Scholars such as Lipski (2005) and Myers-Scotton (1992) have outlined criteria to distinguish CS from borrowing, a conceptual distinction that is broadly accepted in the field (e.g., Poplack 1980). The literature on language contact underscores a consensus that both macro and micro-linguistic and social factors shape the outcomes and direction of borrowing (Matras 2009; Myers-Scotton 2002; Sankoff 2004; Thomason 2001). Thomason and Kaufman (1988) suggest a common pattern in borrowing contexts: words are typically borrowed first, and structural features might follow later, though hardly always. Many researchers have been cautious about generalizing borrowing outcomes due

[43] In this thesis, I am using the term 'borrowings' to refer to words that have been incorporated into the lexicon of a language from another language.

to the unpredictable influence of external factors (Sankoff 2004; Thomason 2001)[44]. However, Matras (2009, pp. 161–162) presents a compelling argument, emphasizing linguistic universals and markedness in determining what and when linguistic elements are borrowed. Matras (2009, p. 151) introduces the concept of borrowability hierarchies, including a 'utilitarian hierarchy' based on how frequently and usefully linguistic forms are employed in specific contexts. Additionally, Matras proposes that deviations from these hierarchies, particularly in lexical borrowing, could arise from external factors like filling linguistic gaps or expressing prestige. He also points out that structural borrowings, especially discourse markers, pose particular challenges because they are hard for bilingual speakers to attribute strictly to one language.

6.1.1.1 Studies on German CS and Borrowings in Contact

In the following, attention will be directed toward selected studies in which borrowings are explicitly the focus of attention, aligning with the later exploration of lexical borrowings in my own data. The emphasis on the Arabic language in Germany aligns with a tradition of research centered on immigrant languages in the country. The majority of this research has primarily focused on the German language, as evidenced by projects like the Heidelberger Project (Heidelberger Forschungsprojekt "Pidgin-Deutsch" 1975) and the Wuppertal ZISA-project, conducted by Clahsen et al. 1983).These investigations were primarily concerned with the stages of German acquisition among the immigrant population, employing sociolinguistic methodologies (see also Becker and Klein 1984; Dittmar 1982; Keim 1978; Yakut 1981). Şimşek and Schroeder's (2011) study focuses on the language use among the younger generation of Turkish speakers in Germany, particularly the variant known as "Deutschlandtürkisch" or "Türkendeutsch" in the literature.[45] This language has been in contact with the German language for more than half a century.[46]

[44] Also, Owens discusses that idioms and the associated semantic structures are not considered at all (see Owens 2023, Chapter 8).

[45] The pidginized German variety of the first Turkish migrant generation, called "Gastarbeiterdeutsch" (Guestworker's German") by Klein and Dittmar (1989) and Keim (2004). In their efforts to identify a descriptive term that avoids discriminatory connotations. Dittmar and Şimşek 2017, p. 193) suggest replacing terms like "Türkendeutsch", "Kiezdeutsch", "multikultureller Ethnolekt", or "Dialekt" with "Kontaktdeutsch". This term is intended as a more general and neutral descriptor that encompasses the language use of the entire diverse group of multilingual German speakers.

[46] Turkish speakers make up the most sizable immigrant population in Cologne, with a long-established presence dating back to migration waves in the 1950s and 1960s.

A recent study by Şimşek (2022) highlights the tendency among multilingual individuals to engage in language mixing, a phenomenon influenced by the contexts in which languages are learned and used. Not only is this phenomenon discussed in public debates as a source of language change or even *Sprachverfall* (language deterioration), but scholarly discourses also acknowledge the potential of multilingual speech forms like code-switching and code-mixing to drive linguistic change. Şimşek (2022, p. 297) demonstrates that, in Mannheim (Germany), language mixing among children and teenagers with Turkish as their first language functions not only as a marker of group identity but also serves communicative purposes, thus establishing a distinct mode of language use among bilinguals.

Sánchez (2019) examines the German language spoken by Spanish migrants in Cologne during the 1960s and 1970s, highlighting that cross-linguistic influence was most evident in the lexicon. Unlike in the 1960s, when Spanish usage was largely confined to private and social settings, modern instances of lexical contact not only facilitate identity negotiation but also enable the expansion of concepts as the variety of linguistic scales and registers increases. This shift has contributed to a decrease in language attrition among migrants, supported by the heightened visibility and prestige of Spanish through globalization and higher connectivity via digital platforms and mass media. The study further discusses how the forces of universalization and particularization in glocalization contexts not only augment linguistic flexibility but also prevent future generations from falling into the diglossic situations prevalent among earlier migrants. Thus, in today's globalized world, Spanish is not only more visible but also plays a significant role in public and digital spheres, which may foster language continuity and enhance the linguistic skills of young migrants.

Shifting the focus to Arabic, Hassan (2018) investigates the incorporation of German-origin words used by both first and second waves of Iraqi Arabic-speaking refugees in Germany and discusses if these German words are examples of CS or borrowing. His findings suggest that these Iraqi-Arabic-German bilinguals predominantly rely on their native language's grammatical structures. Consequently, they prefer using available resources in their language rather than adopting German grammatical conventions. Particularly in areas where the two languages diverge significantly, such as in definiteness and gender marking, the Iraqi asylum seekers and refugees apply Iraqi-Arabic morphological rules to German words. For instance, they might prefix the definite article *il* to these words (2018, p. 148):

(5) *ilyuum* *riḥit* *waqqaʕit* *il-**Kündigung***
ADV go:PERF.1.SG. sign:PERF.1.SG. notice of termination
'I went today to sign the notice of termination.'

Moreover, in some cases they add the feminine sound plural marker *-aat* in order to pluralize German nouns such as *Bahnhof-**aat***, *Ticket-**aat***, *Ausweis-**aat*** (2018, p. 151). These German-origin lone lexical items are types of established borrowings, similar to common English lone lexical items like *radio-**aat*** or *cream-**aat***, where the Arabic plural marking is also applied. These examples illustrate a broader pattern seen in various Arabic varieties when incorporating foreign words (Hassan 2018, p. 151).

At this point it is important to note that speakers who are still in the learning process, have limited knowledge (both social and structural) to effectively manage both of their languages (L1 and L2). This limitation is in the context of a broader understanding of multilingualism and language proficiency, which includes social communication skills and register awareness. These speakers can consciously utilize available linguistic resources depending on the context, and their language use should be understood as dynamic (Şimşek 2022, pp. 295–296).[47]

6.1.1.2 Examples from the Data

In the effort to categorize German borrowings identified within the dataset, they were divided into categories that appeared most frequently. While it is certainly possible to further refine these classifications, my aim is to provide examples from the different contexts in which these borrowings occurred in my data both on Iraqi and Syrian Arabic. The primary division emerged between borrowings that were integrated into syntax/morphology compared to those that appeared independently. A noteworthy observation was that the majority of cases were integrated into the syntax and morphology of Arabic. For this reason, I will focus on the examination using these examples, with particular attention to German borrowings that occur alongside Arabic prepositions – an especially frequent phenomenon.

The following example is drawn from the discourse of a young Iraqi male, Adam, who, when discussing his reasons for not visiting the city center during the pandemic, employs

[47] For an understanding of multilingualism as a resource, see Gövert et al. 2022.

the term *Stadt* ('city') on two occasions. These instances serve as illustrative of morphologically integrated borrowings, with the first occurrence of *Stadt* being embedded within a construction that includes both a preposition and an article, and the second occurrence accompanied by an article alone:

(6) *hassa ijeet li-l-**ištaat***[48]*, ṣaar-li tlat išhur ma šaayif l-**ištaat** yaʕni*[49]

'Now I came to the **city**, I haven't had seen the **city** for three months.'

In a different instance, Murad, a young Syrian male, discusses his employment circumstances. He uses the feminine demonstrative determiner *hay* along with the article when referring to *Berufsschule* ('vocational school') in Arabic. Furthermore, in a subsequent mention, he integrates the term *Jobcenter* into his speech, employing both a preposition and an article with the borrowed word:

(7) *min baʕəd hay il-**brofšoole** ižaana min iž-**žoobsanter,** innu (…) ṣaaḥolna, laʔuulna šuġuḷ*

'After this vocational school, we received [communication] from the job centre. (…) They contacted us and found jobs for us.'

The use of *iž-žoobsanter* illustrates the assimilation process in Arabic, where the definite article is prefixed to the word starting with one a sun letter. As can be seen in (7), the definite article is assimilated to the initial /ž/ sound of *žoobsanter*.

Another example of the integration of German borrowings into Arabic morphology involves the use of the feminine plural ending *-aat*, similar to Hassan's (2018, p. 151) findings in the data on Iraqi speaking refugees in Germany. For instance, in example (8), Amira, a young female speaker, shares insights about her school's examination period, using the term *test-aat* (plural of 'test')[50]. She further discusses continuing with the driving license after finishing her exams using the verb *axaḷḷiṣha* ('to finish them'), where the object pronoun *-ha* (them) refers back to the tests.

[48] The syllable structure is Iraqi, featuring an epenthetic vowel at the beginning of the word.
[49] In this thesis, glossing is applied selectively, only when necessary for clarity. For instance, for longer examples focusing on lexical features, glossing was not used.
[50] In the instances observed in the data, the pluralization of singular German borrowings consistently employs the feminine plural marker *-aat*. This adaptation reflects an integration of Arabic morphological rules, specifically favoring the *-aat* ending for plurals, typically applied to objects rather than humans. Notably, the sound plural ending *-iin* was not used.

(8) *šahar in šaa ḷḷa akammla leen hassa ʕindi tlaθ* ***teest-aat*** *laazim axaḷḷiṣha b-haaða š-šahar gilt axaḷḷiṣha, waraaha*

‘In a month, I hope to finish because I currently have three **exams** and need to complete them within this month. I planned to obtain it [driving license] afterwards.’

Similarly, in the discourse of Murad, a Syrian speaker, he uses the feminine plural suffix when he discusses personal matters, specifically the letters (*bost-aat*) he receives:

(9) *yoom illi bikuun ʕindi* ***fraay***[51] *maθalan biḥmel ḥaali uw biṭlaʕ bšuuf šu ʕindi* ***bost-aat***[52]**,** *bšuuf šu ʕindi wraaʔ laazim aḥilla laazim idfaʕ laazim aʕməl, haada kullo brooḥ baʕməlo*

‘On days when I am **free**, I motivate myself to go out and check which **letters** I have received. I look into what paperwork I need to address, whether there are bills to pay, or tasks to complete. These are all things I need to do.’

According to Erwin's (2004, p. 379) observations, it is noted that *suffix maal constructions* are frequently used alongside borrowed nouns from various languages. This pattern aligns with Owens’ (2005: 188) findings, which highlight that in Nigerian Arabic, terms derived from English mainly embrace the *hana* possessive construction over the *Iḍaafa*. As observed in my data (see examples 10 and 11), the assimilation of German loanwords into Arabic frequently occurs through the *Iḍaafa* construction.:

(10) *min adxul mustašfa uw maθalan aji ašuuf* ***l-iplaan maalti*** *iguuluun maθalan il-yoom [name of the speaker] raaḥ tištuġuḷ wiyya haaða l-mariiḍ haay il-mariiḍa huwwa hiyya biiha koroona, fa aani adxul yaʕni ma ʕindi xoof il ḥamdi laa*

When I enter a [the] hospital and look at **my schedule**, they might say, for example, ‘today, [name of the speaker] will work with this sick man or this sick woman, who has COVID-19’, so I enter without fear, thank God.

(11) *hwaay xaayfa uw siʔlat uw gaalat innu ariid aġayyir* ***maalti l-ištaatioon***[53] *bass galloolha la xaḷaaṣ haaða yaʕni inti laazim itsawwii*

[51] Corresponds to the German *frei* ‘free’.
[52] Corresponds to the German *Post* ‘letter’. Notably, the speaker adds a feminine plural suffix to *Post*, whereas in German it is a collective noun that does not take a plural suffix.
[53] In the phrase *maalti l-iftaatioon*, *maalti* serves as the genitive exponent, signaling possession. The noun *iftaatioon* experiences a phonological modification through epenthetic vowel /i/ which is inserted. This adjustment occurs due to the phonotactic constraints of Iraqi Arabic, which typically avoid the juxtaposition of two consonants at the start of words. This epenthetic /i/ is added to avoid the cluster of consonants resulting from the elision of an original vowel between them, thus conforming to the syllable structure rules that prefer a vowel onset in such contexts. The final structure of *iftaatioon* (VKKVKVVK) illustrates this phonological adaptation.

I'm very afraid and asked 'Could I change **my ward**?', but they told her no, that's enough, you have to do it.

For instance, Amira, a young Iraqi woman, demonstrates the morphological integration of German loanwords into Arabic in a different way. In her phrase *l-ġurfat patsyanten* (room of patients), she does not use *maal* (of) and also deviates from the more grammatically typical form *ġurfat l-patsyanten*:

(12) *tiji l-**buutsifraw***[54]*, lamman tiji tudxul li-l-**ġurfat patsyanten***[55] *(…)*

'The **cleaning staff** arrives, when she enters the **patient's room** (…)

Shifting focus to the Syrian speakers, we observe that they also use the analytic genitive in conjunction with borrowings and with the *Iḍaafa* construction. Hence, my findings are in alignment with Aldoukhi et al.'s (2014, p. 124) description that *tabaʕ* is frequently used with loanwords, characterized by the noun preceding *tabaʕ* and being defined by an article. This is further illustrated by two Syrian speakers, Ashraf, a young male, and Yahya, an older male, who incorporate German loanwords into their speech using both *Iḍaafa* and analytic genitive constructions. For instance, Ashraf's usage of *il-kontrool tabaʕ il-tikit* mirrors (German *Ticketkontrolle*) on the train shows one example:

(13) *maʕo **maske** uw kaan maʕo kill šii bass ṭilaʕ **il-kontrool tabaʕ it-tikit***

'He had a **mask** and everything with him, but there was a **ticket inspection**.'

As already mentioned, borrowings also appeared in genitive constructions without the use of an analytic marker. For instance, Yahya uses the term kors ('course') twice with the possessive pronoun *-i* (indicating 'my'), and in another instance, he uses an *Iḍaafa* construction to refer to his wife's course as *koors marti*:

(14) *ma bihimmni, **koors-i** tʔažžal ma tʔažžal ana ma bihimmni **koors-i**, ma bihimmni **koors marti***

'I don't care if my course gets postponed or not, I'm indifferent about **my course**, and I don't care about **my wife's course** either.'

[54] Corresponds to the German *Putzfrau* 'cleaning staff' (literally 'cleaning lady')
[55] Corresponds to the German *Patientenzimmer* 'room of patients'.

Although is broadly observed that nouns are the predominant form of lexical insertions in CS, as pointed out by Backus (1992, p. 47), this pattern is not exclusive in my data. Speakers, including Yasmin, a young Syrian female, also incorporate German connectors to link Arabic sentence, which is typical in CS:

(15) *waʔət il-aḥiss innu biddi ana laḥ iži uw isʔal,* ***sonst*** *ana tamaam.*

'Whenever I feel like it, I will go and ask; **otherwise**, I'm fine.'

Moreover, among my younger participants, a noteworthy observation is the use of German to describe concepts or activities, particularly evident in conversations about hobbies or educational paths. This phenomenon can be seen, for example, in Mahir's conversations about his interest in pursuing vocational training in music, referred to as *Ausbildung als Musiker*:

(16) *ijiet li-hnaane, gittile yooṃ, aku* ***awsbildung***, ***als***, ***musiik*** *gallatli la ma tsawwi, la, šuuflak ġeer šii*

'I came here and told her, 'Mom, there's **vocational training for musicians**'. She said, 'No, you shouldn't do it. Look for something else instead.'

The following Table 14 represents a list of the most frequently used terms (based on the number of occurences), reflecting the diverse contexts in which German borrowings appear in Iraqi and Syrian Arabic:

Iraqi speakers		***Syrian speakers***	
Kurs	*course*	Kurs	*course*
Ausbildung	*vocational training*	Ausbildung	*vocational training*
Ticket	*ticket*	Test	*test*
Abitur	*high school graduation*	Führerschein	*driving licence*
Gymnasium	*grammar school*	Job	*job*
Hochschule	*university*	Gruppe	*group*
Kontakt	*contact*	Wochenende	*weekend*
Maske	*mask*	Kontakt	*contact*
Chef	*boss*	Duldung	*tolerated stay*
Stadt	*city*	Bayrisch	*bavarian*
Strafe	*fine*	Zeit	*time*
Berufsschule	*vocational school*	frei	*free / time off*
Urlaub	*holiday*	Schule	*school*
Fachoberschule	*technical college*	Jobcenter	*job center*

Kindergarten	*kindergarten*	Stadt	*city*
Wochenende	*weekend*	Schutz	*protection*
Stress	*stress*	Skript	*script*
Hochdeutsch	*Standard German*	Abend	*evening*
Fachangestellte/Angestellte	*Specialist employees /employees*	Berufsschule	*vocational school*
A1/A2/B1 (Deutsch-Niveau)	*German language levels*	Pflege/ Altenpflege	*nursing/ care for the elderly*

Table 14. *List of Predominant German Borrowings Used by Iraqi and Syrian Participants*

Speakers employed German borrowings individually, depending on their environment, reflecting the personal and community interactions with the German language and culture. This usage pattern is captured in the Figure 4, which categorizes the contexts in which these borrowings are most prevalent among both young and old Iraqi and Syrian speakers. This analysis spans several domains, including job, school, the pandemic, the German language and languages in general, friends. An additional category, *other* includes words of everyday experiences and free time. The category *citation* includes instances in which speakers use German words to imitate someone, quote speech, or refer to Germans.

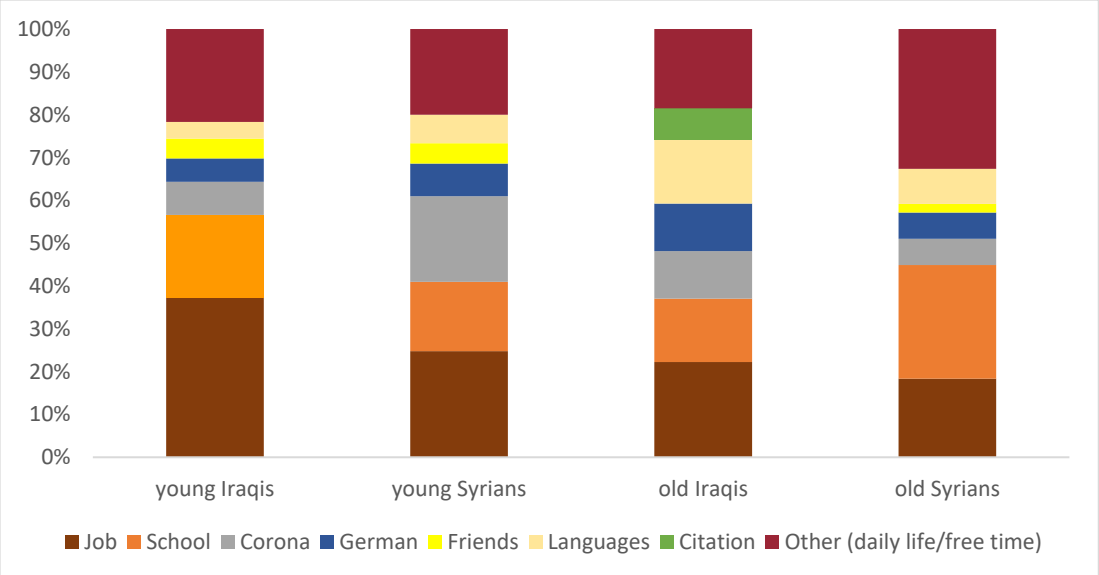


Figure 4. *Contexts of German Borrowings Usage by Age Group of Iraqis and Syrians*

Among young Iraqi and Syrian speakers, the predominant use of German words is observed in the context of employment, education, and discussions related to the pandemic, with Iraqis using borrowings within the 'job' category approximately one-third of the time and Syrians around one-quarter of the time. Additionally, these young speakers, distinctively, engage with German terms in conversations about the German language itself. A trend emerges among the youth, where the category of "friends" is exclusive to their usage. However, it is noteworthy that this usage extends to the older Syrian group. In contrast, older Iraqis do not use any words falling under this category.

Older Iraqi speakers align with their younger counterparts, primarily using German borrowings in professional (approximately a fifth of their usage) and educational contexts, with an additional emphasis on COVID-related discussions and the German language. In the analysis, older Syrians stand out in their use of German borrowings, notably emphasizing the school context more than both young Syrians and both young and older Iraqis. Moreover, the older generation of Iraqis tends to use more German words when talking about the German language and languages in general. In contrast, older Syrian speakers use German words more frequently in the "other" category, encompassing daily life and leisure-related terms. A distinctive category used exclusively by older Iraqis is *citation*. In this context, older Iraqis not only cite Germans but also employ German words in specific situations.

Despite frequent use of German in daily life, Iraqi and Syrian participants expressed strong attachment to their Arabic varieties, which remain vital for both adaptation and practical use. Older speakers especially favor Arabic at home, concerned about their children's language loss. The following analysis examines how age, gender, and conversational context (individual vs. group) influence the use of borrowed words.

6.1.1.3 Iraqi Arabic Corpus: Variationist Results

The analysis of this variable is based on 737 occurrences in the raw data to determine the frequency of German borrowings among different age groups of Iraqi speakers. My findings from the mixed-effects model show that younger speakers tend to use German

borrowings more frequently than older speakers. Specifically, for every 10,000 words[56], young speakers used 130 borrowings, while older speakers used only 52.

This difference indicates that, on average, younger Iraqis use German terms about 60%[57] more frequently than the older speakers. Additionally, the results of the mixed model show that the influence of age on the use of borrowings is statistically significant, which means that it is unlikely this pattern occurred by chance ($p < 0.001$). This suggests a clear trend where younger individuals are incorporating more German terms into their speech compared to older individuals. It is noteworthy to mention that the usage by female and male speakers was almost equal, as can be seen in the following figure:

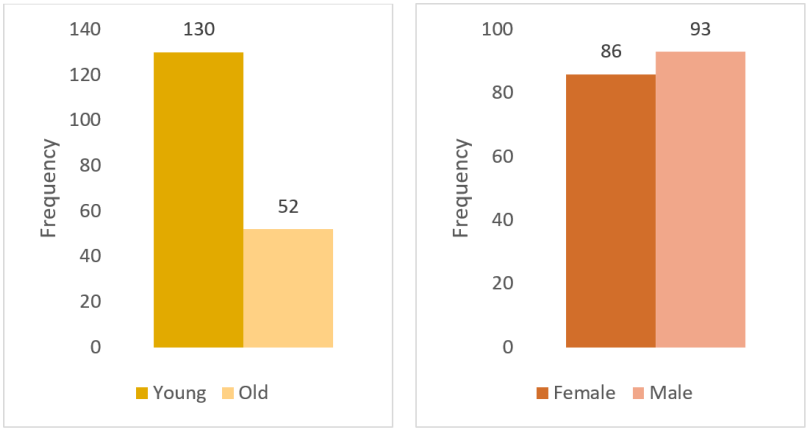


Figure 5. *Normalized Frequencies of German Borrowings Among Iraqi Speakers (Age and Gender)*

Further analysis of conversational settings highlights how these individual preferences manifest themselves differently across social interactions. For instance, in group interviews involving both Iraqi and Syrian speakers, there is a marked increase in the use of German loanwords. Specifically, the normalized frequency of German loanwords is higher in group conversations, with 103 instances per 10,000 words, compared to 88 in individual

[56] In this analysis, normalized frequencies are used, expressed as the number of tokens per 10,000 words. For individual speakers, the number of tokens is divided by their total number of words spoken, then multiplied by 10,000. For groups, all tokens from the group are aggregated and then normalized against the total words spoken by the group. This approach is further elaborated in Section 5.2.5.3 of the thesis, where the normalization process is discussed in more detail.

[57] Here, the coefficient of -0.907 from the GLMM is in logarithmic form, which can be difficult to interpret directly. To simplify, I exponentiated the coefficient, yielding a factor of approximately 0.40. This indicates that older individuals use German borrowings about 60% less frequently than younger ones, based on the calculation ($1 – 0.40 = 0.60$, or 60%). This transformation is essential for making the results more accessible and interpretable.

interviews. The data indicate a preference for using German borrowings in group settings and reveal a statistically significant increase ($p < 0.0001$)[58], with usage approximately 49% higher in group interactions than in one-on-one contexts. To further explore this pattern, I analyse how German borrowings are specifically used by the four participants from the individual interviews who also participated in the group conversation (see Figure 6).

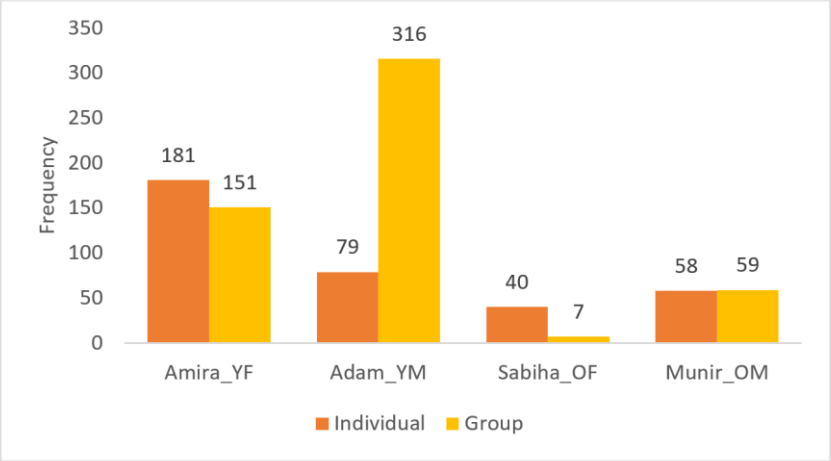


Figure 6. *Comparison of German Borrowings Frequencies in Individual vs. Group Conversations Among Iraqi Speakers (Normalized Frequencies for Each Speaker)*

The young female speaker, Amira, slightly reduces her use of German borrowings during group conversations, decreasing from 181 to 151 tokens. Following her individual interview, there seemed to be a decrease in her contact with German speakers. Moreover, her marriage to an Iraqi man was also a change that might have influences her language usage. This change in her personal life shifted her social circles, causing her – as she confirmed – to spend more time with her husband and less with German friends. However, during her individual interview, her profession as a nurse led her to speak extensively about the pandemic, with numerous German technical terms appearing in her narratives. In contrast, Adam (young male speaker) almost quadruples his use of German borrowings in group conversations, rising from 79 to 316. This increase results from his frequent interactions with German speakers and his new job, particularly in his role supporting autistic individuals. His responsibilities, which involve explaining and assisting them in their daily lives,

[58]Adam uses German borrowings significantly more often than the others, which may skew the results. Although I normalized the data to account for this discrepancy, the speaker's high word usage still leads to a disproportionately significant impact on the overall findings. This effect is not evident in the descriptive analysis alone but is crucial for understanding the observed significance.

necessitate the use of German as a primary language. Additionally, his partnership (starting after the individual interview) with a German and frequent interactions with colleagues have contributed to this linguistic behavior. The older male participant, Munir, remains consistent in his use of German borrowings across both individual interviews (58 tokens) and group discussions (59 tokens), with most borrowings referring to German bureaucratic entities and regulations. Sabiha (older female speaker), in contrast, reduces her use of borrowings in group discussions, dropping from 40 to just 7 tokens.

These patterns seem to intersect significantly with the speakers' personal backgrounds and experiences. A more detailed investigation of the contexts where these borrowings are prevalent reveals that the domains of school and employment are the most frequent. Indeed, many of these younger Iraqi Arabic speakers are deeply integrated in a socio-cultural landscape that is dominated by German. With all of them having German friends, partners, or often communicating in German with siblings, this shift is possibly a result of a limited Arabic-speaking environment. Older speakers, in comparison, often use German borrowings for everyday terminology when the Iraqi Arabic lexicon lacks a direct equivalent. Interestingly, the old female participants of the study show low borrowing rates and tend to maintain a strong connection with their native Arabic. While older speakers emphasize the importance of speaking Arabic at home, they acknowledge the necessity of German for educational and integrative purposes. This mindset is not just a personal belief – it mirrors the external pressures and societal expectations in Germany. Proficiency in German is perceived as a key to better job opportunities and an improved quality of life which was mentioned often by the speakers.

6.1.1.4 Syrian Arabic Corpus: Variationist Results

In examining the usage of German loanwords among Syrian Arabic speakers, the study analysed 544 occurrences. The analysis shows that younger speakers used significantly more German borrowings, with 106 instances per 10,000 words, compared to 48 for the older speakers. This difference translates to younger speakers using German terms approximately 59% more frequently than the older speakers. This pattern is supported by the mixed model analysis, where the age-related coefficient highlights the significant decline in the use of German borrowings with increasing age among Syrian speakers. The data

clearly demonstrate an age-related difference in the adoption of German loanwords. Moreover, as shown in Figure 7, gender differences are minimal.

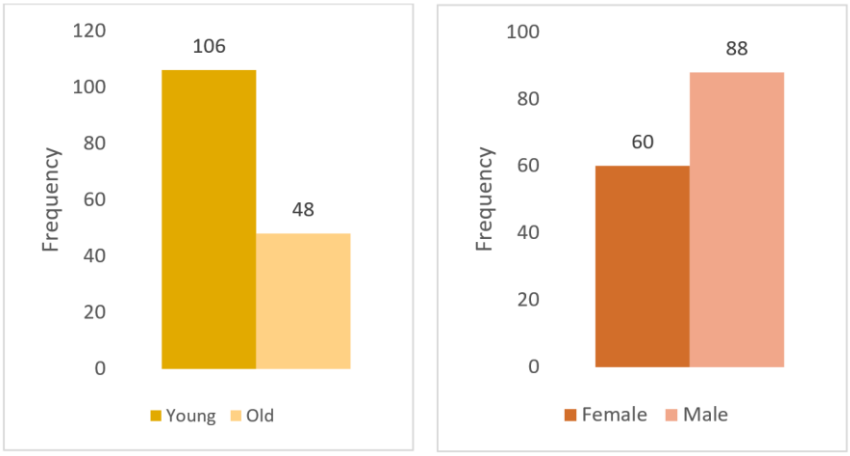


Figure 7. *Normalized Frequencies of German Borrowings Among Syrian Speakers (Age and Gender)*

Regarding conversational settings, the data show a distinct pattern: group discussions featured significantly more German borrowings, with 115 instances per 10,000 words, compared to 68 in individual interviews. The statistical analysis indicates a nearly doubled likelihood of using German borrowings in group discussions, reflecting a 96% increase in usage compared to one-on-one settings.

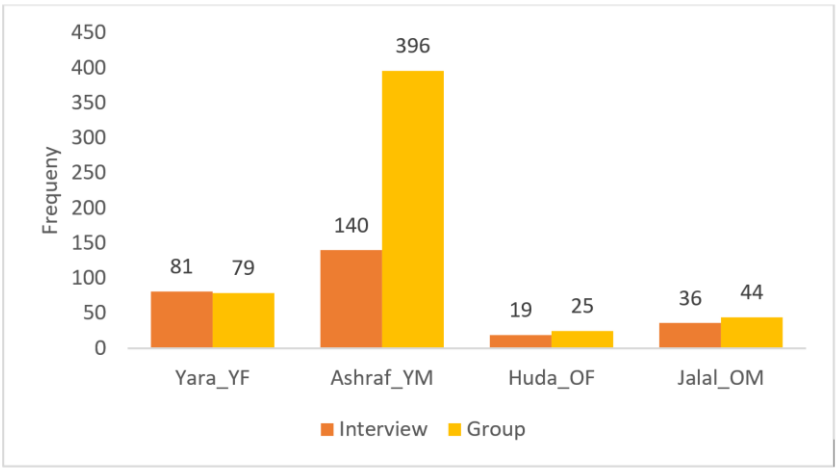


Figure 8. *Comparison of German Borrowings Frequencies in Individual vs. Group Conversations Among Syrian Speakers (Normalized Frequencies for Each Speaker)*

In addition to the statistical analysis, it is crucial to shed light on the individual linguistic behaviors of some of my participants, as these add important information to the quantitative findings. The youngest participant, Ashraf, stands out for his frequent usage of German words, rising from a count of 140 in the interview to 396 in the group interaction. Engaged to a Russian girl with whom he communicates primarily in German, his linguistic profile shows signs of language attrition in Arabic. He often finds himself at a loss for Arabic words and even switches from Arabic to German during group discussions to better express himself. This behavior strongly suggests his increasing comfort and integration within the German society, underscored by his extensive social interactions with native Germans.

In contrast, the young female speaker, Yara, uses noticeably fewer German words in her interactions. Being more shy and introverted than Ashraf, she spends much of her time at home, often in the company of her sister. In the individual interview, she highlights the challenges she faces in forming friendships in Germany, attributing the difficulty to significant differences in thought patterns and attitudes compared to German girls. Both older Syrian participants (Huda and Jalal) have limited interactions with Germans. The German vocabulary they use is highly specific and mainly relates to interactions with German authorities, or terms related to employment, education, and the ongoing COVID-19 pandemic – words that lack direct equivalents in their native Syrian Arabic.

6.1.1.5 Interim Conclusion

The statistical analysis shows notable differences in the usage of German borrowings, both in relation to age and conversational context. Firstly, age serves as a significant determinant, with older participants from both groups demonstrating a decreased tendency to incorporate German borrowings compared to the younger speakers. This observation suggests a generational shift in language preferences, wherein younger speakers show a higher usage of German vocabulary. Additionally, the context of communication plays an essential role in borrowing tendencies. Group discussions consistently show a higher frequency of German borrowings compared to individual interviews. Therefore, the presence of speakers conversing in different dialects within group contexts appears to influence higher usage of German. This suggests that linguistic diversity within groups may stimulate increased borrowing behaviors and variability among participants. Therefore, linguistic

accommodation takes place to bridge dialectal differences or to find a common linguistic ground. It enables the speakers to converse more effectively within the dynamic setting of a mixed group.

These observations are further reinforced by the participants' backgrounds and experiences, particularly within domains such as education and employment. Younger Iraqi Arabic speakers, being in a German-dominated environment, demonstrate a heightened incorporation of German terms, reflecting their integration into German society. With many of them having German friends, partners, or often communicating in German even with siblings, this shift is possibly a result of a limited Arabic-speaking environment. Their shift toward German, being accentuated by their immersion in educational institutions, workplaces, and primary social spheres, demonstrates their integration efforts in the German society. As the frequency of German borrowings rises, Arabic proficiency appears to be weakened. This shift may reflect the growing need to use German in the new environment. Additionally, this trend may indicate the beginning stages of language attrition as individuals adapt to their changed linguistic circumstances. This aligns with Şimşek's (2022) observation of German-Turkish bilingual youths being able to consciously manipulate linguistic resources depending on context and the higher usage of German vocabulary due to their active social and educational environments. bilingual individuals in Germany use their linguistic repertoire to bridge gaps and adapt to their environments. Nevertheless, there are notable differences between the Arabic diaspora and the Turkish-speaking one, which will be discussed in Section 7.1.

A prevalent reason for these borrowings is the absence of equivalent terms in speakers' native dialects, leading speakers to borrow from German to fill lexical gaps (Matras 2009, p. 151), a process known as lexical expansion. Therefore, speakers borrow from German to enrich their lexicon and effectively express ideas or phenomena not present in their native language (Hassan 2018). Certain German terms like *Ausbildung* ('vocational training') and *Berufsschule* ('vocational school') become necessary for the speakers in Germany, representing concepts or entities with no direct parallels in their native Arabic. Consequently, they rely on German vocabulary to express specific ideas and situations encountered in their daily lives in Germany.

Among younger participants, a noteworthy trend is the use of German to describe concepts or activities, particularly evident in discussions about hobbies or educational paths. This may suggest a linguistic shift or attrition, where the adoption of German terms fills gaps in the speakers' Arabic lexicon or reflects a preference for German in certain

contexts. In contrast, older speakers often resort to German borrowings for everyday terminology when the Iraqi Arabic lexicon lacks direct equivalents. Notably, older female participants show lower borrowing rates and retain a strong connection to their native Arabic. While they stress the importance of speaking Arabic at home, older speakers also recognize the need to use German for education and integration – an outcome shaped by external pressures and societal expectations in Germany. Proficiency in German is perceived as essential for accessing better job opportunities and improving overall quality of life in Germany. This section highlights the diverse pathways through which language borrowing occurs, shaped not only by immediate lexical needs but also by broader factors such as exposure, frequency of usage, and personal affinity towards the borrowed language. It also illustrates the adaptable nature of bilingual or multilingual speakers' linguistic repertoires, as language choice is influenced by multiple factors. These aspects will be explored in greater detail in Chapter 7.

6.1.2 Allah Expressions (Religious Phrases)

A second lexical domain pertains to religious phrases, which remain integral to everyday conversations in Arabic-speaking communities. Religious phrases like *inshallah* ('God willing'), *alhamdulillah* ('praise be to God'), and *allah ysallimak* ('May God protect you') are commonly used in everyday Arabic conversations (Morrow 2006; Piamenta 1979; Welji 2012). They are even known to non-Arabic speakers. These utterances often make direct or indirect references to Allah, which is the equivalent of the word God in the Arabic language.[59] According to Morrow (2006), the Arabic language is densely filled with numerous expressions that call upon Allah, either directly or indirectly, to the extent that it can be considered ever-present in Arabic. Consequently, it is almost unimaginable for an Arabic speaker to have a conversation without some mention of God occurring. Morrow (2006, pp. 45–46) emphasizes:

> "the Arabic language is saturated with a rich variety of expressions invoking Allāh explicitly or implicitly and that the name *Allāh* permeates both spoken and written Arabic

[59] Varied terminology is used to describe these phrases in academic literature, including *Allah expressions* (Jaradat, 2014; Piamenta, 1979, 1983), *Allah lexicon* (Morrow, 2006), *religious invocations* (Clift and Helani, 2010), *Arabic God-phrases* (Welji, 2012), and *religious formulas* (Migdadi and Badarneh, 2013).

> to the point where we can speak of the omnipresence of Allāh in the Arabic language. As a result, an Arabic speaker could scarcely conceive of a conversation where the name of God would not appear."

Moreover, Allah expressions appear in different contexts, from casual conversations to formal interactions, serving various communicative purposes such as offering congratulations, greetings, farewells, and expressions of gratitude. They may also appear in the form of curses and other utterances. Importantly, these phrases exhibit a range of primary, secondary, and metaphorical meanings and can be employed irrespective of the speaker's religious beliefs (Abboud; Clift and Helani 2010; Gilsenan 1983;). Among the earliest scholarly works on Arabic religious expressions are studies by Piamenta (1979), who create an extensive catalog of "God-phrases" and explored their religious and cultural implications in both classical and colloquial Arabic.

Grasping the meanings and applications of religious phrases in Arabic is crucial, as evidenced by research indicating that these phrases often transition from their literal religious connotations to assume pragmatic meanings in daily communications, rendering their semantic meaning only tangentially related to their actual usage (Farghal 1995; Ferguson 1983; Piamenta 1979). Further research underscores that neglecting this pragmatic shift in practical use can lead to communication failures and/or misinterpretation of the original message (Farghal and Borini 1997), and may detach language and culture from their original context. Given the widespread use of these religious phrases in everyday Arabic communication (Piamenta 1979; Wikan 1996), it is crucial to understand the actual application of these religious phrases in Arabic to avoid such problems.

Before examining the use of Allah expressions, it is important to acknowledge prior research on their pragmatic roles across Arabic dialects. Farghal (1995), for instance, explores the use of *inshallah* ('if God permits') in Jordanian Arabic and finds that it has undergone notable pragmatic shifts, now functioning variably as a directive, commissive, or expressive depending on the context. Furthermore, Clift and Helani (2010) examine *inshallah* and related expressions in Syrian Arabic using conversation analysis. They show that these phrases often function at topic boundaries, enabling a shift to a new subject in the interaction.

Ferguson (1983) focuses on "God-wishes" in Syrian Arabic and analysed a corpus of 31 religious invocations involving *inshallah* and its cognates, identifying patterns in their contextual meanings and explaining the appropriate occasions for their use. Migdadi

et al. (2010) conduct a similar study on the phrase *mašaallah* (‘what god has willed’) in colloquial Jordanian Arabic, drawing from naturally occurring instances. Their findings indicate that, beyond its traditional use as a protective invocation against the evil eye, the expression now fulfills a range of function, such as expressing compliments, joy, modesty, sarcasm, conversational backchanneling, mitigation, and group affiliation. The term *mašaallah* functions prominently as a compliment intensifier. This usage is exemplified in the scenarios illustrated by Migdadi et al. (2010, p. 488). In this example, *mašaallah* boosts the compliment, making it sound even more positive. By asking for God’s protection, *mašaallah* highlights how special the praised person or thing is, suggesting they might attract unwanted negative attention or the “evil eye”. One example is in the context of a young woman entering a friend’s house (Migdadi et al. 2010, p. 488):

(17) ***maašaallah*** *dhaan ḥilu kθiir, ṣaḥ yusif?*
‘***maašaallah*** it’s a very beautiful paint, isn’t it, Yousef?’

Similar to the English phrase “knock on wood”, this expression serves as a protective shield, calling for divine safeguarding against the evil eye. Essentially, it conveys the sentiment “May God shield this”. In the following example, a young woman discussing her sister's family with a friend Migdadi et al. (2010, p. 485):

(18) ***mašaallah*** *uxti ʕindha θalaθ ʔawlaad ubintayn u ḥaamil*
‘maašaallah my sister has three sons and one daughter and is also pregnant’

Additional insights into the multifunctional roles of religious expressions in Arabic dialogue come from Migdadi and Badarneh (2013). They explored the varied pragmatic functions of phrases that praise the Prophet in colloquial Jordanian Arabic. Their study identified seven distinct roles these phrases play, including holding the conversational floor, protecting against the evil eye, signaling success, claiming speaking turns, ending undesirable activities, fostering audience engagement and agreement, and emphasizing the core message. Welji (2012) examined the performative aspects of God-phrases in Levantine Arabic, which encompasses dialects from Syria, Jordan, Lebanon, and Palestine/Israel. Using examples from three Arabic films, she argued that these phrases fulfill multiple functions due to the cultural and religious weight attributed to invoking the name of God. These functions include creating a sense of community, lending authority and legitimacy

to the speaker, conveying an image of religious piety, and augmenting the speaker's ability to influence others.

Jaradat (2014), in a more recent study focusing on Jordanian Arabic, discovered that some religious expressions have evolved over time, losing their original invocative meanings but gaining new ones. For instance, phrases once primarily intended as invocations are now commonly used to express surprise or to seek protection and guidance. In the context of the diverse usage of religious expressions, Al-Rojaie (2021) explores the pragmatic functions in Najdi Arabic, the dialect of Central Saudi Arabia, going beyond their conventional religious significance, by employing speech act theory and politeness models. The study emphasizes that these phrases, traditionally rooted in religious contexts, have pragmatically evolved to serve various communication needs, including softening statements, introducing skepticism, and adding humor, among others, all while adhering to and being shaped by social and cultural norms. The author highlights the dual role of these expressions in politeness: fostering solidarity and minimizing imposition. Notably, the analysis prioritizes the exploration of speakers' intended meanings in specific conversational contexts, emphasizing that the phrases' interpretation and application are significantly molded by the interactional, social, and cultural parameters within the Najdi Arabic-speaking community, thereby demonstrating a pragmatic drift from their original religious meanings to varied everyday uses.[60]

6.1.2.1 Examples from the Data

Building on the broader insights outlined in the literature, this section examines how Iraqi and Syrian Arabic speakers in Germany use religious expressions in everyday interaction. The data confirm that these phrases retain their cultural and religious significance, functioning within expected patterns of use. No substantial departures or innovative uses were observed; rather, the findings align closely with established descriptions. They manifest themselves in various contexts, spanning casual conversations to formal interactions, serving diverse communicative purposes like offering congratulations, greetings, farewells,

[60] It is important to note that, in Germany, young Turkish and Arabic speakers frequently use the youth slang term *wallah* translates to 'Ich schwöre.' (I swear) or 'Ich schwöre bei Gott.' (I swear to God). When someone uses this term in a sentence, they are emphasizing their sincerity and credibility, such as in the following example: *Der Film ist voll gut, wallah!* (Havryliv 2021, p. 189). For a detailed overview of this youth-specific discourse marker, see Bahlo (2010).

and expressions of gratitude. In group conversations with Iraqi and Syrian participants, a notable contrast emerged: female groups discussed emotional subjects extensively and used religious expressions far more frequently than male groups (271 instances among females vs. 99 among males). To provide an example from the group interview, when discussing emotional topics such as the death of the sister and daughter of the Iraqi speakers, who were both present during the session, participants began employing numerous religious expressions to express solidarity and empathy.

(19) Dialogue from group interview (two Iraqi/ two Syrian female speakers)

Amira (young Iraqi):	*(...) iḥna uxti fiqadnaaha bass yaʕni aḥyaanan hwaaya ġaṣṣa li-ʔannu iḥna la nigdar insaafir il-suurya wa la nšuufha wa la mawjuuda baʕad ma mawjuuda bi-l-ḥayaat*	'(...) we lost my sister, but sometimes there's a deep sadness because we can neither travel to Syria to see her nor is she present anymore. She is no longer in our lives.'
Huda (old Syrian):	*il **ḥamdu llaah**, ṣaḥ, ay biḍall yaʕni innu fii šii ṣaḥ, (...) innu ma tiʔidru, ayy mazbuuṭ ṣaḥ akiid, ṣaḥ akiid **al ḥamdu llaah** akiid, **al ḥamdu allah** (...)*	'**Thank God**, there's something, there's still something left. (...) You can't do that anymore, right. Yes, of course, of course, **thank God**, certainly, **thank God**.'
Yara (young Syrian):	*ṣaʕbe heek šwayy ma biddna nfattiḥilkun žruuḥaatkun bass ṣaʕbe*	'It's a bit difficult, we don't want to reopen your wounds, but it's hard.'
Sabiha (old Iraqi):	*ay ṣaḥiiḥ huwwa ṣaʕba innu insaan min tifuqdii w baʕad ma tšuufii w innu insaan w huwwa ʕaayiš bass tismaʕiin axbaara min baʕiid yaʕni (...) inti ʕindič **maa šaa aḷḷaah** tisiʕ awlaad, yaʕni haðoola lo mxalliyathum b-suurya ḍaaʕaw*	'Yes, that's true, it's hard when you lose someone and can no longer see them. When a person is alive, you at least hear his/her news from far away. You, **by God's will**, have nine children, so if you had left them in Syria, they would have been lost.'
Amira (young Iraqi):	*bass aani daaʔiman aguul innu šaxiṣ mawjuud bi-l-ḥayaat tsimʕiin axbaara uw daaʔiman titwaaṣliin wiyyaa afḍal min šaxiṣ inmiḥa xaḷaṣ ma mawjuud, fa **il ḥamdi laa w iš-šukur** daaʔiman ʕala kull ḥaal innu inti miṭmaʔinna ʕaleehum*	'But I always say that having someone in your life, knowing how they are, and always being in touch with them is better than having someone who is no longer present in your life. So, **thank God and always be grateful** for being at peace with their presence.'

Reflecting on the personal and emotive conversations shared among the women in the group, it seems that religious expressions play a crucial role in fostering a sense of closeness and trust. Also, my own observations confirm the importance of religious expressions as a tool for emotional and social bonding within the group. In line with Al-Rojaie's (2021) findings, these expressions serve a dual role in politeness – both fostering solidarity and minimizing imposition. However, while the data hint at possible shifts in meaning shaped by interactional, social, and cultural factors – as noted by Al-Rojaie (2021) – this aspect lies beyond the scope of the present analysis. Instead, I will now provide a statistical overview of the use of religious expressions among the different groups, starting with the Iraqi participants.

6.1.2.2 Iraqi Arabic Corpus: Variationist Results

The corpus contains 548 instances of religious expressions in total. Normalized frequencies show that older speakers use Allah expressions more often – 86 occurrences per 10,000 words, compared to 46 among younger speakers. Despite observable tendencies, the mixed-effects model analysis shows that age is not a statistically significant factor in the frequency of these expressions. Likewise, the difference in usage between female and male participants does not reach statistical significance (see Figure 9).

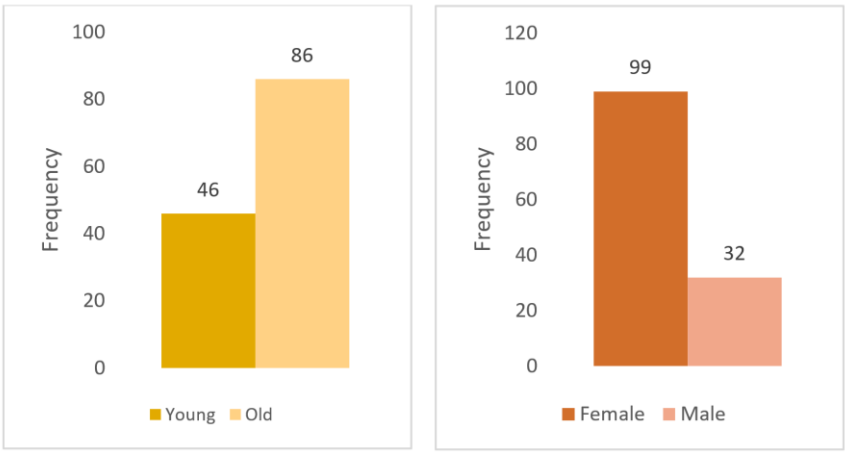


Figure 9. *Normalized Frequencies of Religious Expressions Among Iraqi Speakers (Age and Gender)*

Among all interviews, the highest frequency of religious tokens is observed in the speech of two older female participants. These speakers are explicitly religious, often emphasizing their strong religious beliefs, prayer practices, and faith in God. Their linguistic choices reflect this deep religiosity. Interestingly, the younger female Iraqi participants also shows a high frequency of religious expressions, particularly the daughter and daughter-in-law of one of the old females with the highest frequency. In contrast, the youngest male Iraqi participant, already noted for his difficulties with the Arabic language, uses the fewest religious expressions. Additionally, another older female speaker rarely employs religious expressions in the individual interview, suggesting that high-frequency use of religious phrases is not strictly correlated with age or gender but may have more to do with individual religious commitment and other aspects.

Moreover, the analysis shows that the conversational setting significantly influences the use of religious expressions among Iraqi Arabic speakers. In individual interviews, religious expressions occurr at a normalized rate of 72 per 10,000 words, compared to 37 in group conversations involving Syrian speakers. This corresponds to a 66% higher usage rate in individual settings, a difference that is statistically significant ($p < 0.001$).

In examining general qualitative aspects of religious expressions used by the four speakers (see Figure 10), a noteworthy pattern emerges that reveals significant context-dependent variations. The young female speaker, Amira, shows a marked reduction in religious expressions during group conversations, dropping from 80 tokens in individual interviews to just 22. A similar, though more modest, decline is observed in the young male speaker, Adam, and the older male speaker, Munir. The most pronounced decrease occurrs in the older female speaker, Sabiha, whose usage fell sharply from 252 to 65 tokens.

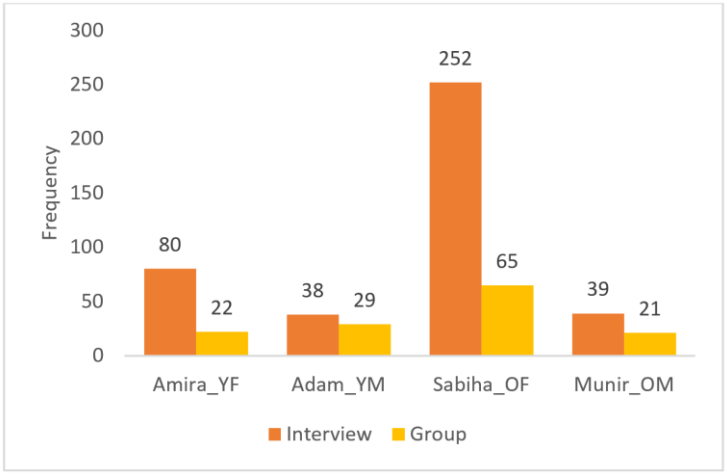


Figure 10. *Comparison of Religious Expressions Frequencies in Individual vs. Group Conversations Among Iraqi Speakers (Normalized Frequencies for Each Speaker)*

6.1.2.3 Syrian Arabic Corpus: Variationist Results

In the Syrian corpus, which contains 375 raw occurrences of religious expressions, normalized frequencies show that older participants use them more frequently, 81 instances per 10,000 words compared to 19 among younger participants. This considerable difference is statistically significant, with older participants using religious language approximately 4.42 times more than the younger speakers ($p < 0.001$). Gender also influences the usage of religious expressions. Male participants produced 68 instances of religious expressions, significantly more than the 33 instances used by females. Statistical analysis confirms this gender difference, indicating that males use religious expressions approximately 2.35 times more often than females ($p = 0.038$).

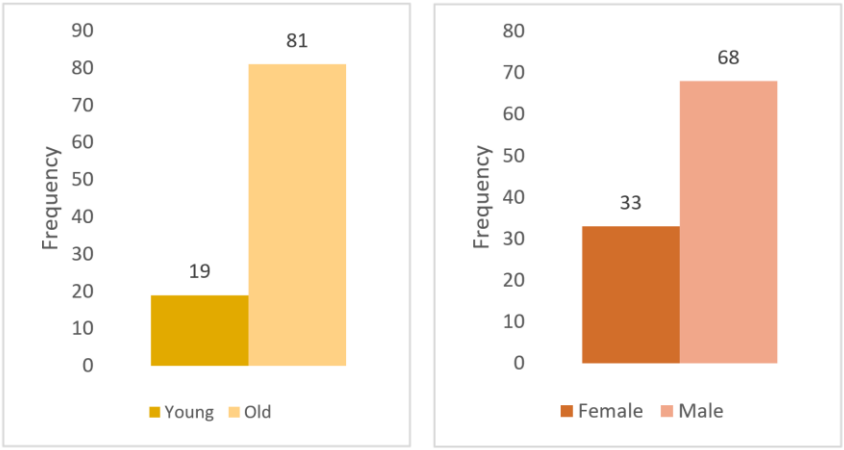


Figure 11. *Normalized Frequencies of Religious Expressions Among Syrian Speakers (Age and Gender)*

The conversational context further affects the usage of religious expressions. In group settings, their usage is 58% more frequent than in individual interviews, indicating that speakers are approximately 1.58 times more likely to use religious expressions in group conversations ($p < 0.0001$).

Additionally, qualitative observations reveal interesting patterns among different groups (see Figure 12). Younger Syrians, both males and females, show the fewest instances of religious expressions overall, but they use religious expressions more actively in group conversations. Among older speakers, a distinct contrast emerges in different settings. For instance, the older female speaker uses religious expressions much more in group interviews (161 occurrences) compared to individual interviews (63 occurrences). In contrast, an older male speaker showed a significant decrease in the use of religious language in group conversations with Iraqis, dropping from 75 to 34 tokens.

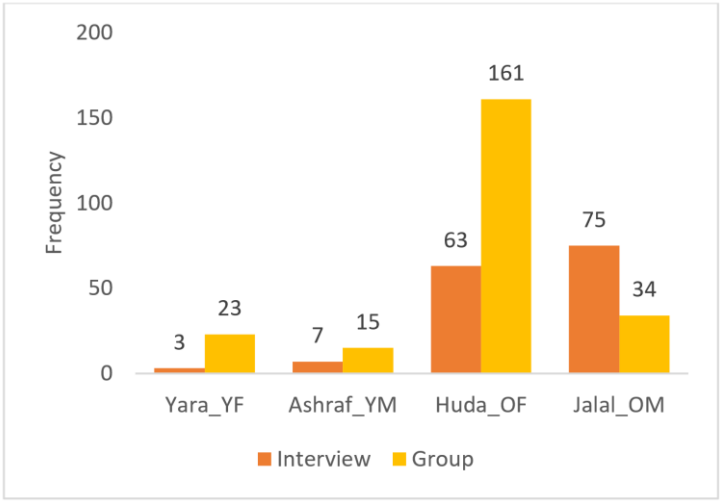


Figure 12. *Comparison of Religious Expressions in Individual vs. Group Conversations Among Syrian Speakers (Normalized Frequencies for Each Speaker)*

6.1.2.4 Interim Conclusion

The statistical analysis shows that among Iraqi participants, age and gender do not play a significant role in the usage of religious expressions. Instead, the conversational context is the dominant factor, revealing different trends: Iraqi speakers who participated in both individual and mixed-group interviews scaled back their use of religious expressions when speaking in a group context. This suggests that conversation settings have a substantial influence on the religious linguistic choices of the participants in this study. Such a shift could indicate a form of linguistic accommodation, possibly a strategic or subconscious adaptation to maintain social distance – not merely a matter of speech style or religiosity.

In contrast to the Iraqis, Syrian speakers tend to use religious expressions more frequently in group settings. This distinction highlights the influence of cultural or contextual differences between the two groups. Among Syrians, age proves to be a significant factor, as older participants more frequently employ religious phrase, pointing to generational shifts in linguistic usage. The effect of gender is also significant, as male speakers generally use religious expressions more frequently. The random effects within the model further reveal considerable individual variability among both groups, underscoring the importance of personal linguistic tendencies. It should be noted that younger participants mentioned that religious expressions are more frequently used by older individuals, suggesting an association between these phrases and the typical Arab character of elder speakers. This observation aligns with the broader trend of a gradual decrease in the use of

Arabic language, as evidenced by the decreasing use of German words among participants. Additionally, it was mentioned that the use of religious expressions, even among older speakers, reflects a sense of politeness and cultural etiquette.

6.1.3 Preposition 'with': *wiyya* vs. *maʕa*

This section will closely examine one of the many contrastive lexical items between Iraqi and Syrian Arabic. The preposition under discussion is just one example of the lexical differences between these dialects.[61] Notably, some Iraqi speakers are conscious of adapting their vocabulary towards the Syrian variety. For instance, an elderly female speaker noted changes in her own use of words:

> *hwaaya kalimaat itġayyirat min il-ʕarabiyya maalti, ṣaarat mu ʕiraaqiyya ṣaarat kalimaat suuriyya yaʕni la iraadiyyan leen aani ma mitqaṣṣida aḥči suuri bass hiyya kalimaat la iraadiyyan itġayyirat ʕindi*
>
> 'There are words that have changed from my Arabic; they've become not Iraqi but Syrian words. I mean, not intentionally because I don't mean to speak Syrian, but these words have unintentionally changed for me.'

Arabic prepositions not only serve as structural connectors but also carry meanings that contribute to the overall clarity and coherence of expressions. The usage can vary significantly across different Arabic dialects. My data reveal clear distinctions between Syrian and Iraqi Arabic in the use of the preposition meaning 'with' which varies regionally across dialects, with *wiyya* and *maʕa* emerging as the two dominant forms in the Arabic-speaking world. *Wiyya* is found in Iraqi Arabic, while *maʕ* or *maʕa* is used in different dialects.[62] In Iraqi Arabic, a distinctive term *wiyya* is predominantly used, which signifies companionship, as exemplified in the phrase 'I'm going with her':

(20) *ana raayiḥ* ***wiyya*** *uxti*

(21) *ana raayiḥ* ***wiyyaaha***

[61] Iraqi speakers also used in some cases *ktiir* ('much') instead of the Iraqi form *hwaaya* (*kulliš* ***ktiir*** 'very much') or *kamaan* ('also') instead of Iraqi *hamm/hammeen(a)* (*hassa* ***kamaan*** *rijʕat ħatta flaawanzat il-xanaaziir* 'now the swine flu has been back'). It has to be noted that the dataset did not contain enough instances of this feature, as compared to *wiyya* and *maʕa*, to allow for a comprehensive statistical analysis.
[62] The mixed form *miyya* is observed in Western Sudanic Arabic as well as in dialects from Upper Egypt.

Similary, *maʕ* or *maʕa* is used with a noun object and with a pronoun object in in Syrian Arabic:

(22) *ana raayiḥ* ***maʕa*** *uxti*

(23) *ana raayiḥ* ***maʕaaha***

In the Iraqi Arabic dictionaries by van Ess (1978, p. 254) and Clarity et al. (2003, p. 200), the term 'with' is translated as *wiyya* and *maʕa* (*raḥ-atġadda wiyyaa l-yoom* 'I'll have lunch with him today'). The preposition *wiyya* can be used as a dependent or independent form of a word (Erwin 2004, p. 148).[63] Meanwhile, SA and many Arabic dialects, including Syrian Arabic, predominantly use the term *maʕ* for 'with' (Stowasser and Ani 1964, p. 265). Yet, Syrians, especially in informal settings, might also use *wiyya* or its variants, likely influenced by neighboring dialects interactions (according to my Syrian assistant from Damascus who assisted in data collection).[64]

6.1.3.1 Examples from the Data

Within the dataset, lexical variances between the two dialects emerge prominently, especially in the usage of the preposition 'with'. In group settings, Iraqi speakers show a noticeable tendency to prefer *maʕa* over *wiyya*, especially when contrasted with individual interviews. This preference aligns with the usage patterns of Syrian participants in the same group discussions, who also favor *maʕa* and typically avoid the *wiyya* form, which is characteristically Iraqi. This linguistic adaptation is salient, as it deviates from age and gender variations discussed elsewhere in this study, directing attention to the role of conversational context. This contextual influence becomes apparent as it seemingly guides the choice towards *maʕa*, thus homogenizing dialectal expressions by levelling of *wiyya*. Although van Ess (1978, p. 254) and Clarity et al. (2003, p. 200) document 'with' as being realized as both *wiyya* and *maʕa* in Iraqi Arabic, the statistical analysis reveals an

[63] In consonance with general phonological rules, when a suffix is appended, the final vowel is elongated, transforming the suffixing stem from *wiyya* to *wiyyaa*. For instance, it becomes *wiyyaa* instead of *wiyya Ali* (Erwin 2004, p. 148).

[64] Shedding light on the origins, Leitner (2022, p. 172) posits that *wiyya* is derived from a contraction of Old Arabic *wa-ʔiyyā-, referring to Procházka (1993). Within her focus on Khuzestani Arabic, *wiyya* is more frequently used over its alternate forms *wayya* and *wəya*. Leitner cites consultants from Baghdad who suggest a variant pronunciation of this preposition in Muslim Baghdadi Arabic, using just one /y/. A separate variation with the vowel /a/ is observed in Tikrīt (Procházka 1993, pp. 199–200).

outstanding trend: *maʕa* is rarely employed in conversations among Iraqi speakers, occurring predominantly in interactions with Syrians. The following examples show the usage of the two variants:

(24) *ḥasab il-waqit naakul w baʕdeen laazim nirjaʕ li-ʔann aani hamm ʕindi is-saaʕa sitta ʕaziima* ***wiyya*** *ṣadiiqti il-aḷmaaniyya l-yoom, msawwiin ʕaša* ***wiyya*** *il-ʕaaʔila kull fooxinenda*[65].

'Depending on the time, we eat and then we have to go back because I also have an invitation **with** my German friend at 6 PM today. They prepare dinner **with** the family every weekend.'

(25) *(…) li-ʔann yišuufuuk šaab da-tsuuq siyyaara qadiima lo šaayib yimaššuuk maḥḥad yiḥči* ***wiyyaak***

'Because they see you're young and driving an old car, if you were older, they would let you pass and no one would talk **to you**.'

In group conversations, an old female Iraqi speaker uses *maʕa* while replying to a Syrian and telling what she is planning to do after the group conversation:

(26) *irruuḥ naaxuðinna*[66] *šwayya hiiči šwayya bi-l-aswaaq nšuuf il-aswaaq (…)* ***maʕa*** *z-zilim.*

'We go around and spend some time in the shops, we have a look in the shops (…) **with** the men.'

In the male group conversation, an old male Iraqi speaker complained with the Syrian speakers about the police in Germany who stop and ask for the ID card:

(27) *yaʕni waḷḷa š-iḍaḥḥik, inta leeš ma tiʕmil* ***maʕaahum*** *ištiraak? yaa axi ixið min ʕidhum hawiyya w imši bi-š-šaariʕ, yaa axi šinu hal mahzala haay?*

'How funny it is! Why don't you work **with them**? My brother, take the ID from them and walk on the street. My brother, what a joke!'

[65] Corresponds to the German *Wochenende* ('weekend').
[66] Here, Assimilation occurs where *il-na* becomes *inna.*

6.1.3.2 Iraqi Arabic Corpus: Variationist Results

In the analysis of the Iraqi Arabic corpus, which contains 303 occurrences in the raw data (272 instances of *wiyya* and 31 of *maʕa*), the data show that *wiyya* is overwhelmingly favored by both older and younger Iraqi speakers. Older speakers use *wiyya* in nearly 89% of cases, and younger speakers even more so, at over 91%, leaving *maʕa* as a marginal choice across both age groups. The statistical analysis shows no significant effect of age on this choice. Similarly, both male and female speakers display the same pattern, predominantly using *wiyya*, as illustrated in the following figure:

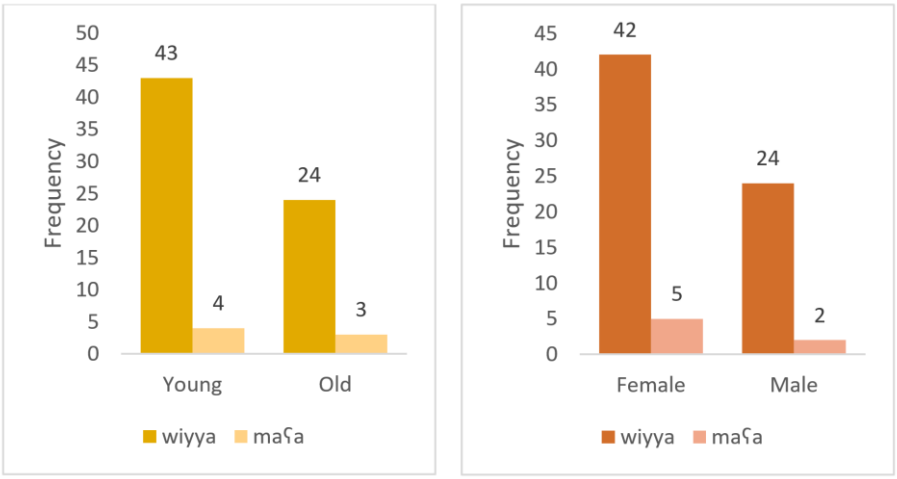


Figure 13. *Normalized Frequencies wiyya and maʕa Among Iraqi Speakers (Age and Gender)*

The conversational context notably influences the choice between *wiyya* and *maʕa*. In group discussions, *wiyya* is chosen 66.0% of the time, while *maʕa* accounts for 34.0%. In contrast, during individual interviews, the preference for *wiyya* increases to 94.4%, with *maʕa* being used only 5.6% of the time. The mixed model analysis confirms a significant shift in preference, showing that the presence of *maʕa* in group conversations involving Syrians is more than 10 times as likely compared to individual interviews ($p < 0.0001$). This substantial difference underscores the strong influence of conversational context on linguistic choices, with group settings and interactions with Syrian speakers leading to increased use of *maʕa*.

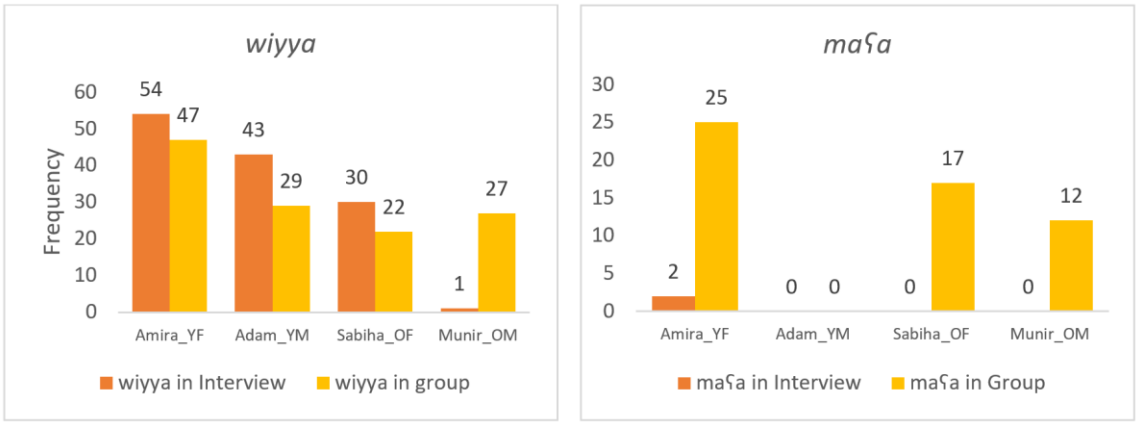


Figure 14. *Comparison of wiyya and maʕa in Individual vs. Group Conversations Among Iraqi Speakers (Normalized Frequencies for Each Speaker)*

Observations from speakers who participated in both settings show distinct individual usage patterns. Notably, Amira and Sabiha – both of whom spent five years in Egypt and two years in Syria before relocating to Germany – show the highest frequencies of *maʕa* usage in group conversations. Their preference for *maʕa*, the colloquial form in both Egypt and Syria, suggests that previous residence in these regions may significantly influence variant selection. This aligns with earlier participant information presented in Table 9 (see Section 5.2.2.1.1) and is further illustrated in Figure 14, which highlights how individual language histories shape and interact with broader usage patterns.

6.1.3.3 Syrian Arabic Corpus: Variationist Results

In the Syrian Arabic dataset (553 occurrences, raw data), *maʕa* overwhelmingly dominates over *wiyya*, with 532 instances compared to just 21. This preference holds consistently across both age and gender. Older speakers use *maʕa* 53 times and *wiyya* 3 times per 10,000 words (94.64%), while younger speakers show a slightly stronger preference – 96 uses of *maʕa* versus 3 of *wiyya* (96.97%). Gender patterns are similarly uniform: female speakers use *maʕa* 80 times and *wiyya* 3 times (96.39%), and male speakers show a 95.71% preference, with 67 instances of *maʕa* and 3 of *wiyya*.

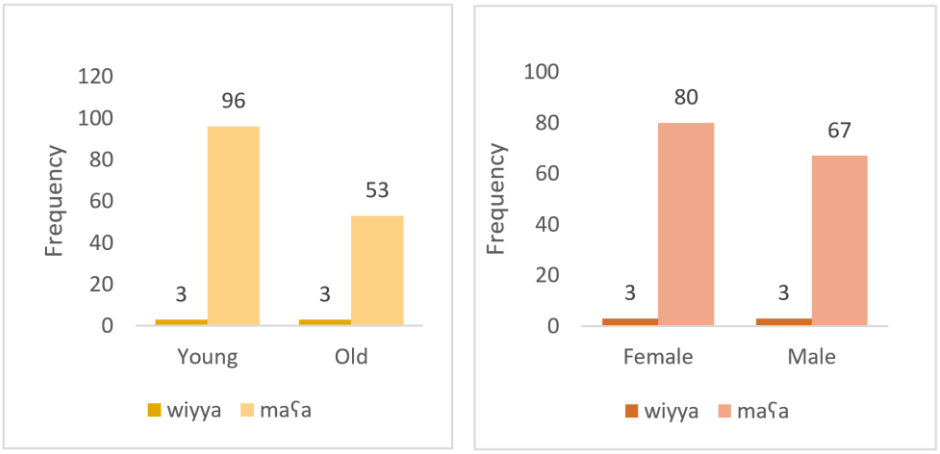


Figure 15. *Normalized Frequencies wiyya and maʕa Among Syrian Speakers (Age and Gender)*

The comparative usage between Syrian and Iraqi speakers highlights significant differences. In group dialogues involving Iraqi speakers, *maʕa* is used exclusively 56 times, while *wiyya* is not used at all. In individual interviews, *maʕa* continues to dominate with 76 mentions compared to only 3 for *wiyya*, demonstrating a strong preference of 96.15% for *maʕa* as can be seen in the following figure:

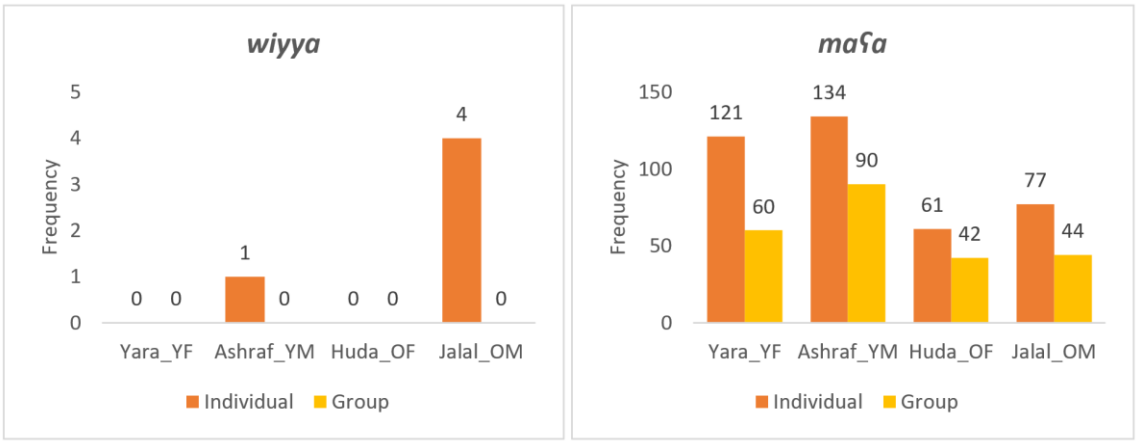


Figure 16. *Comparison of wiyya and maʕa in Individual vs. Group Conversations Among Syrian Speakers (Normalized Frequencies for Each Speaker)*

6.1.3.4 Interim Conclusion

Wiyya was selected for analysis as one of the key lexical features distinguishing Iraqi from Syrian Arabic, as discussed in Section 4.1.3 (f). The findings show that *wiyya* remains the preferred term for 'with' among Iraqi Arabic speakers, consistent across age and gender groups. Nonetheless, the choice of lexical items is notably influenced by the conversational context, particularly when interacting with Syrian speakers.

In group conversations that include Syrians, Iraqi speakers often shift from using *wiyya* to *maʕa*. This reflects a preference for the variant used by Syrian speakers. This adaptation represents a classic example of linguistic accommodation, illustrating how Iraqis modify their speech to align with Syrian usage – a phenomenon contributing to the overall hypothesis of this study. Despite this shift, the predominant use of *wiyya* in one-on-one interviews underscores a maintenance of dialectal identity when accommodation is not necessary. The stark contrast between individual and group settings highlights significant lexical variability, with a statistically notable difference in the usage of *wiyya* and *maʕa*. More detailed aspects of this phenomenon will be discussed in Section 7.2, where the focus lies on the discussion and implications for the overarching hypothesis.

6.1.4 Synthetic vs. Analytic Genitive

In this section, I turn the attention to the investigation of genitive constructions in both Iraqi and Syrian Arabic. Within the Iraqi corpus, on the one hand, we distinguish between the synthetic genitive, traditionally known in Arabic linguistics by its classical grammatical term, *Iḍaafa* construction, and the analytic genitive realized with *maal*. On the other hand, in the Syrian Arabic corpus, two principal genitive forms are used: the synthetic genitive *Iḍaafa* and the analytic genitive realized with *tabaʕ*. After an overview on the analytic genitive, in the following sections, the focus will lie on three significant aspects. Firstly, the use of genitive markers *maal* and *tabaʕ* in comparison to the classical *Iḍaafa* construction (*maal*/*tabaʕ* + N) will be explored and later analysed statistically. Secondly, our attention turns to constructions that involve a definite noun followed by either *maal*- or *tabaʕ*-, along with an attached suffix pronoun (*maal*/*tabaʕ* + PRO). The third aspect of focus is the occurrence of analytic genitive constructions that include German borrowings (nouns). German borrowings were included as an additional independent variable in the mixed-effects model to test for their effect on the usage of the analytic genitive.

6.1.4.1 Analytic Genitive: Overview

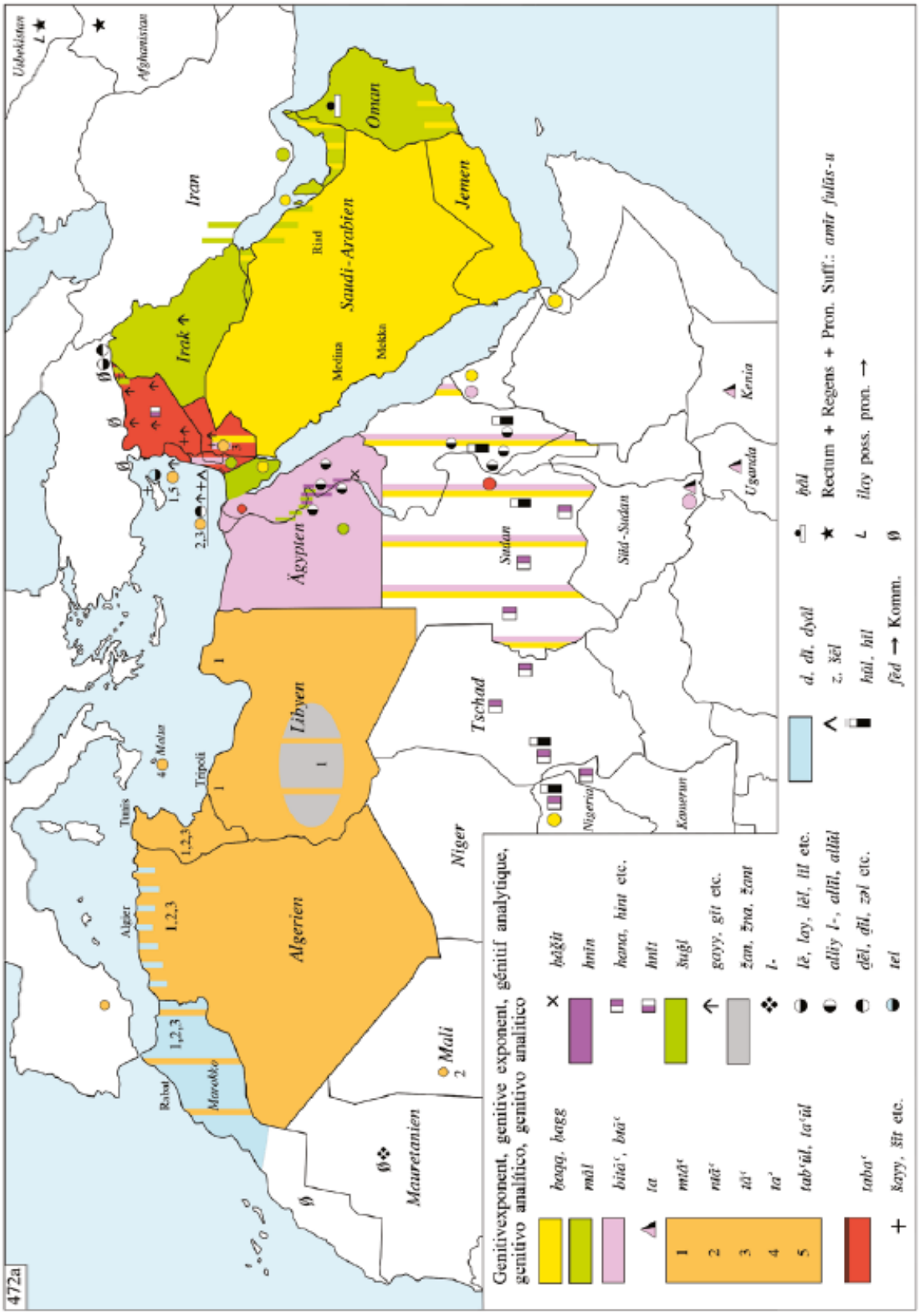
Arabic dialects typically include a genitive exponent that can replace the synthetic genitive construction (*Iḍaafa*). This construction can manifest as the "classical" *Iḍaafa*, where the possessed and possessor are juxtaposed (see example 28 below), or as the analytic genitive, where the two are connected via an independent word. In the study of Arabic dialects, it is frequently termed a "genitive exponent" or "genitive marker" (Eksell Harning 1980[67]; Bettega 2019). In this function, it serves a role comparable to a preposition, facilitating the periphrastic genitive, similar to the English 'of' or French 'de' (see also Rosenbach 2002). In the analytic genitive, the genitive relation is expressed through a specific genitive exponent situated between the noun and its possessor. This genitive morpheme derives from a range of usually nominal forms in various dialects, including *tabaʕ* 'following' (Levantine Arabic) and *maal* 'property' or 'possession' (Iraqi Arabic, Gulf Arabic) which will be the focus of this section. These structures show a similarity to what is commonly referred to as an analytic genitive, observed in various other Arabic dialects such as *mtaaʕ* in Libya, *bitaaʕ* in Egypt and Sudan, and *dyaal* in Morocco and *ħagg* in several Arabic dialects of the Arabian Peninsula (see Holes 2004; Versteegh 2014, among several others) which will be shown below. Watson (2011, p. 865) gives an overview of the genitive exponents in different Arabic dialects:

Dialect	Dialect form	Pre-grammaticalised cognate
Baghdad	māl	māl 'property; possessions'
Upper Egypt	ihnīn	hana 'thing'
Chad	hana	hana 'thing'
Damascus	tabaʕ	tabaʕ 'property'
Jerusalem	šēt	šay' 'thing'
Yemen	ḥagg	ḥagg 'right; property'
Negev	šuġl	šuġl 'work'
Aleppo, Palmyra	geyy/gī	unknown
Cairo	bitāʕ	bitāʕ 'property'
Oman	māl	māl 'property'
	ḥāl	ḥāl 'state'
Tunis (Jews)	ntāʕ, tāʕ, ta-	matāʕ 'property'
Morocco, north-west	d-, dyal	demonstrative element

Table 14. *Overview of Genitive Exponents in Different Arabic Dialects According to Watson (2011, p. 865)*

[67] The monograph by Eksell Harning (1980) is highly recommended as it provides a comprehensive overview of analytic genitive forms in modern Arabic dialects.

These genitive exponents act in harmony with the syntactic genitive, and a variety of these exponents can be found, each representing a specific geographic region. The following map by Behnstedt and Woidich (2021, p. 405) shows the analytic genitive forms in the different Arabic varieties:



Map 3. *Analytic Genitive in Different Arabic Dialects*
(Behnstedt and Woidich (2021, p. 405)

In Standard Arabic (SA), possession is primarily expressed through synthetic constructions, commonly referred to as the 'construct state' or *Iḍaafa*. This involves juxtaposing two nouns, where the second noun, which acts as the possessor, is inflected in the genitive case (N+N), as shown in example (28). Additionally, possession can be indicated by affixing a pronominal possessor to a noun (N+PRO), as shown in example (29) according to Eksell Harning (1980, p. 10).

(28) *kitaabu salma*
book Salma
'Salma's book'

(29) *kitaab-u-ha*
book-NOM-OBJ.3.SG.F
'her book'

Eksell Harning (1980, p. 10) notes that in SA, while prepositions can convey possession, the emphasis in this discussion is on attributive possession within the noun phrase rather than possession expressed in other phrase types. In SA, the construct state (*Iḍaafa*) facilitates synthetic constructions. Although Eksell Harning (1980, p. 10) highlights the use of prepositions to indicate possession in SA, this examination centers on attributive possession within the noun phrase, excluding other phrase categories. Analytic structures are prevalent in nearly all dialects (see e.g. Eksell Harning 1980; Lipiński 1997).

As many Arabic dialects show a tendency toward the analytic genitive, the following section will provide several examples. In Egyptian Arabic, the term *betaʕ* is employed (Eksell Harning 1980, pp. 83–84).

(30) *il-baab it-taani* ***betaʕ*** *il-mistawqad*
'the door of the other anteroom'

(31) *il-kaatib da* ***btaʕ-na***
'this our writer'

In Tunisian and Libyan Arabic, alongside the synthetic forms associated with SA, there are also analytic forms built using the genitive exponent *mtaaʕ (mtɛːʕ)*, originally a term

denoting ‘property’ or ‘possession’ (Eksell Harning 1980, p. 98). Examples include the following (Sayahi 2015, p. 334):

(32) *l-ktɛːb* ***mtɛːʕ*** *Salma*
DEF-book of Salma
‘Salma’s book’

(33) *l-ktɛːb* ***mtɛːʕ****-ha*
DEF-book of-3.SG.F
‘her book’

Comparable particles like *dyal* or *di* in Moroccan Arabic are also used, which can be followed by either a lexical or pronominal possessor (Sayahi 2015, p. 334). In Sudan, the exponents are *ḥaqq*, *bitaaʕ*, *hiil*, *huul*, *alliil*, whereby *ḥaqq* and *bitaaʕ* are the most common ones (Eksell Harning 1980, p. 152; Trimingham 1946, p. 46). To give one example from Sudanese Arabic (Worsley 1925, p. 21):

(34) *wad* ***huul*** *al-ḥakiim*
‘a son of a doctor’

Given the existence of synthetic genitives in the same dialects, there arises a choice between the two system. An analytic genitive phrase fundamentally consists of a noun, an exponent, and a modifier, with the relationship being indicated by the exponent). Typically, the noun is substantive, and the phrase can be expanded with added modifiers or coordinated elements. Components related to either the noun or modifier are positioned closely to their respective parts, either preceding or following them (Eksell Harning 2006, p. 83):[68]

[68] For clarity in formal contexts, the analytic genitive might be chosen over the potentially complex or vague "synthetic genitive syntagma" Eksell Harning 2006, p. 83), especially when the noun is described further, has multiple counterparts, or the phrase has layered components. The surrounding linguistic and social context can influence this preference. For instance, it is often used for stylistic reasons (e.g. for heavier construction that is used). The rapid shifts and diverse language communities in urban areas could push towards the use of the more explanatory analytic genitive, especially during periods of language change (Eksell Harning 2006, p. 85).

(35) *l-beet* ***tabaʕ*** *l-malik*
‘the king’s house’

l-beet l-kbiir ***tabaʕ*** *l-malik*
‘the king’s big house’

l-beet ***tabaʕ*** *l-malik l-kbiir*
‘the great king’s house’

Beyond Syria’s borders, certain regions employ words similar to *tabaʕ* in analogous ways. For instance, in parts of Lebanon and Palestine, the form *btaaʕ* is used, often with full adjectival inflection. This variation introduces plural forms like *btuuʕ* or *btaaʕun*. In Palestine, *tabaʕuun* emerges as the plural form, while in Damascus, *šiit* or *šyaat* prevails, and Palestinians opt for *šeet* in the plural form *šayyuut*. Furthermore, *tabaʕ* is pivotal in the periphrasis of annexation. Within this framework, an attributive *tabaʕ* phrase is often described as annexation, particularly when the initial term is a recent loanword or a substantive that ends in a vowel (excluding the -e/-a suffix, e.g., *r-raadyo* ***tabaʕi*** instead of *raadyooy-**i***). Furthermore, the *tabaʕ* construction is commonly used to express relationships, characterized by a more casual or distant nature, diverging from the closer associations implied by annexation. For instance, *s-suuke tabaʕne* conveys ‘our corner’, while *suukatna* would suggest a stronger sense of ownership or intimacy (Cowell 2005, p. 490).

6.1.4.2 Possession in Arabic Contact Situations

It is relevant to briefly look at the interaction between possession and language contact, as the incorporation of German words into the speech of the sample plays an important role in my data. In Owens (2002, p. 194), the relationship between the *Iḍaafa* and English-mixed nouns is explored. A notable trend is the rare use of the *Iḍaafa* possessive with English-mixed nouns. Specifically, if the N + N *Iḍaafa* formation is predominantly employed for terms with a high conventional collocation frequency, then it would logically be less inclined to be used with English-mixed nouns that tend to be repeated less often. The second point is that the NP *hana* NP structure aligns closely with the English genitive form of NP of NP. This can be illustrated by the translation of the example (36) provided in (Owens 2002, p. 194):

(36) *hu al-**prooblum** hana l-**fadral***
it DEF-problem hana.M DEF-federal
'It is a problem of the federal government.' (9.51.1873)

Owens (2005b) notes that when possession involves a pronoun in Nigerian Arabic, the analytic structure becomes dominant, especially if the possessed noun is English-based (83/89 instances) compared to Arabic (6/89). Overall, in his corpus, analytic constructions represented a mere 12.7% of total possessive forms. By way of contrast, synthetic structures, which in the majority of cases paired with Arabic, accounted for a vast 87.3%. English nouns only sparingly appeared in synthetic forms, being present in just 21 of the 610 examples. Owens (2002, p. 188) further showed that in Nigerian Arabic, English-derived terms predominantly adopt the *hana* possessive, and less so the *Iḍaafa*.

A similar tendency towards the analytic form is found in Moroccan Arabic, especially among Moroccan-Arabic-speaking children residing in the Netherlands. Boumans (2006, p. 220) pointed out that when kinship terms or body parts from SA or French are used, they predominantly follow the analytic construction. In comparison to their monolingual counterparts in Morocco, the immigrant speakers showed a marked preference for using the analytic construction for denoting possession (*r-raas dyal l-kelb*, translating to 'the head of the dog'), as opposed to the synthetic form *raas l-kelb* ('dog head'). Boumans theorizes that this shift in Moroccan heritage Arabic might be influenced by Dutch, the dominant language in their new environment. This pattern was also observed in older Western Arabic dialects, such as Andalusi Arabic, which experienced significant influence from the Romance languages (Sayahi 2019; Thomas and Sayahi 2012). The expression of possession is shaped by various factors, including the morphological structure of the head noun and the pragmatic significance of the phrase (Boumans 2006; Rosenbach 2002). It is noteworthy that when Arabic vernaculars come into contact with European languages, there is a marked increase in the use of the analytic genitive form, especially in instances of linguistic borrowings. While several possessive markers exist across various Arabic dialects, this examination will center primarily on *maal* and *tabaʕ*.

6.1.4.2.1 *maal*

In Bahrain, Iraq, the Emirates, and Kuwait, the particle *maal* is commonly used (Holes 1984, pp. 127–128). The word *maal*, originally meaning 'property', has undergone

grammaticalization, evolving into a linker for nominal attribution, especially in the formation of the analytic genitive. All forms of *maal* can be combined with a pronominal suffix, one of many characteristic also noted in the *maal* form existing Khuzestan Arabic (Leitner 2022, pp. 176–177).[69] Erwin (2004, pp. 378–379) explains the usage of the particle within Iraqi phrase construction. This investigation uncovers two distinct categories of *maal* phrases: *suffix maal phrases* and *independent maal phrases*. These two categories will be explained further in the following.

Suffix Maal Phrases

Maal phrases feature mostly a definite noun followed by one of the stems *maal-*, *maal(a)t*, or *maalaat-* with an attached pronoun suffix. For example, *r-raadyo maali* translates to 'my radio'. The choice of which form to use depends on the gender and number of the preceding noun (Erwin 2004, pp. 378–379):

- *maal* is used after a masculine singular noun (*t-taktiik maala* 'his tactics')
- *maal(a)t-*[70] follows a feminine singular noun, a dual, or a plural noun that does not refer to human beings (*l-xiṭṭa maalatha* 'her plan')
- *maalaat-* is the preferred form after a feminine dual or plural noun that refers to human beings (*l-xaddaamteen maalaathum* 'their two maids'). However, in the case of a masculine dual or plural noun referring to human beings, *maal* is occasionally used.

The following table 15 provides a summary of the different forms of *maal*:

maal/ maalat	**SINGULAR**	**PLURAL**
1.	*maal-i/ maalt-i*	*maal-na/ maalit-na*
2.M	*maal-ak/ maalt-ak*	*maal-kum/ maalit-kum*
2.F	*maal-ič/ maalt-ič*	
3.M	*maal-a/ maalt-a*	*maal-hum/ maalit-hum*
3.F	*maal-ha/ maalit-ha*	

[69] For a detailed exploration of the varied semantic functions of *maal* in Khuzestan Arabic, including its roles in expressing possession, material, origin, type, temporal and spatial relations, purpose, and quantity, see Leitner's comprehensive overview Leitner (2022).
[70] The suffix *maal(a)t-* displays allomorphy: *maal-at-C#* in closed syllables and *maal-t-V* in open syllables.

maalaat	**SINGULAR**	**PLURAL**
1.	*maalaat-i*	*maalaat-na*
2.M	*maalaat-ak*	*maalaat-kum*
2.F	*maalaat-ič*	
3.M	*maalaat-a*	*maalaat-hum*
3.F	*maalaat-ha*	

Table 15. *Forms of maal Depending on Gender and Number of the Possessed (based on Leitner et al. 2021, p. 87)*

Suffix *maal* phrases are the linguistic equivalent of a noun with an attached pronoun suffix. They are commonly translated into English using possessive forms like “my”, “your”, “his”, etc. The choice between a noun with a pronoun suffix and a suffix maal phrase hinges on the type of noun and its relationship with the possessor. Nouns with a pronoun suffix are more common with items referring to close or permanent possessions or relationships, such as body parts, clothing items, or family members. In contrast, *suffix maal phrases* are more commonly employed with borrowed nouns from other languages, dual nouns, and nouns within an annexion as seen in the example *t-talafoon maalak* (for more examples, see Erwin 2004, p. 378).

Independent Maal Phrases

In independent *maal* phrases, a noun or noun phrase precedes *maal*, followed by another noun or noun phrase. While *maal* sometimes adopts the form *maal(a)t-* if the preceding noun is feminine, it generally remains unchanged. For instance, examples like *r-raadyo maal Ali* (‘Ali's radio’) and *ṣaabuun maal ḥilaaga* (‘shaving soap’) illustrate the diverse contexts in which *maal* phrases are effectively employed (Erwin 2004, p. 379).

Erwin (2004, p. 374) makes a comparison between *Iḍaafa* and *maal* constructions: *Iḍaafa* constructions primarily serve as a means of expressing concepts related to close or permanent possession, delineating family relationships, and associating measures with substances or containers with contents. Notably, *Iḍaafa* exclusively comes into play when the

initial term is a quantifier. For instance, the phrases *nuṣṣ il-leel* (‘half the night’) and *šway-yat čaay* (‘a little tea’) serve as examples that show the application of annexion.

In stark contrast, *maal* phrases, come into common use when the initial noun is borrowed from another language, when the first noun is enriched or modified by an adjective, and when one or both nouns are already part of an *Iḍaafa*. For instance, phrases like *l-ḥadiiqa maal il-beet* (‘the garden of the house’), *ktaab it-taariix maal Ali* (‘the history book of Ali’), and *l-pardaat maal ghurfat in-noom* (‘the curtains of the bedroom’) illustrate the diverse contexts in which maal phrases find effective application (Erwin 2004, p. 379).

6.1.4.2.2 *tabaʕ*

In the context of Syrian Arabic, the possessive particle *tabaʕ* is used to express ownership. It carries the meaning of “belonging to” or “property” (plural *tabʕaat*) and is often employed to emphasize possession, similar to expressions like “belongs to me” or “is mine”. Additional emphasis is achieved when the stand-alone personal pronoun follows, comparable to Iraqi Arabic constructions with *maal*. According to Aldoukhi et al. (2014, p. 124), *tabaʕ* is – similarly to the Iraqi Arabic *maal* – frequently used with loanwords and word groups whose leading word is in the dual form. The noun always precedes *tabaʕ* and is determined by the article (Aldoukhi et al. 2014, p. 124):

(37) A: *hayy šantaayet miin*? ‘Whose bag is this?’
B: *hayy šantaay**ti***. ‘This is my bag.’
C: *laaʔ, hayy aš- šantaaye **tabaʕi**!* (or: *laaʔ, hay š-šantaaye **tabaʕi** ʔana!*) ‘No, this is my bag!

The analytic genitive *tabaʕ* in Syrian Arabic is identified as forming phrases that serve a dual role as both a headless possessor (e.g., *ha s-stiilo tabaʕ fariid meaning* ‘this pen belongs to Fareed/is Fareed’s’) and as attributes (as seen in the question *ween s-stiilo tabaʕ fariid?* ‘Where is Fareed’s pen?’). Consequently, the direct suffixation to a noun can be avoided through the use of *tabaʕ* (Cowell 2005, pp. 489–490). The form *tabaʕ* with suffixes often corresponds to a possessive pronoun (Aldoukhi et al. 2014, p. 124). However, the use of *tabaʕ* varies among speakers. Some individuals avoid using *tabaʕ* with indefinite following terms and, instead, prefer to use annexion phrases or the *la* phrase, such as

tabaʕuu-li ‘belonging (PL) to him’ (Cowell 2005, p. 489). In its plural forms, *tabaʕ* takes on the shapes of *tabaʕaat* and *tabaʕuul*. These plural forms signify the noun-like character of *tabaʕ* (Cowell 2005, p. 490). The following table gives an overview on the different forms of *tabaʕ* (based Aldoukhi et al. 2014, p. 124 and Cowell 2005, pp. 489–490):

tabaʕ/ tabʕaat	**SINGULAR**	**PLURAL**
1.	*tabaʕ-i/ tabʕaat-i*	*tabaʕ-na/ tabʕaat-na*
2.M	*tabaʕ-ak/ tabʕaat-ak*	*tabaʕ-kon/ tabʕaat-kon*
2.F	*tabaʕ-ek/ tabʕaat-ek*	
3.M	*tabaʕ-o/ tabʕaat-o*	*tabaʕ-on/ tabʕaat-on*
3.F	*tabaʕ-a/ tabʕaat-a*	

Table 15. *Forms of tabaʕ Depending on Number and Gender of the Possessed*

6.1.4.3 *maal*: Variationist Results

Turning the attention to my corpus, an illustrative example of *maal* taken from a conversation where a young female speaker discusses residing in Regensburg, is given (38). She uses *maal* in *il uuni klinikum maal Regensburg*, but not in *madiinat Regensburg* where the Iḍaafa is used.

(38) *ʕaaʔilti kullha b-aḷmaaniya saakne fii madiinat Regensburg, adaawim b-il* ***uuni klinikum maal Regensburg***.

‘All of my family lived in Regensburg in Germany. I work at the **university clinic of Regensburg**.’

While the primary focus of this analysis is on the utilization of *maal* vs. Iḍaafa, it is relevant to examine the occurrences of *maal* in conjunction with pronominal possessors as opposed to its instances with nouns. Subsequent sections will provide a detailed overview of these occurrences, extending to the employment of *maal* with German lexical borrowings. Section 6.1.4.3.3 will provide a statistical comparison to explain the relative frequency of *maal* and *Iḍaafa* among the different age groups and conversational contexts.

6.1.4.3.1 maal with PRO

In this section, the usage of *maal* with pronominal possessors will be explored, contrasting these forms against their usage with nouns. This examination draws upon the distinction between a noun phrase with a pronominal possessor (N+PRO) as highlighted by Eksell Harning (1980, p. 10) and Sayahi (2015, p. 334). Specifically, I explore the *suffix maal phrase* characterized by a definite noun followed by one of the stems *maal-*, *maal(a)t-*, or *maalaat-* with an attached pronoun suffix. Erwin describes this construction as a noun phrase where the *-at* form becomes automatized with the introduction of a pronominal possessor, exemplified in phrases like *maal-at-na* ('ours') or *il-biet maal-at-na* (the house is ours), with data showcasing both variants such as *il-biet maal-na* (Erwin 2004, p. 378), as shown in the following example from a young male Iraqi speaker:

(39) *ey čaan ygulli inta š-ʕindak jaay hnaana inta sakanat nuurinbeerg, gittla leeš haaða s-suʔaal il-ġariib yaʕni čaan iguul laa mu iḥna širṭa w ḥaqna nisʔal gittla okay aani šiġli haaða b-ṣaffi w iða triid ši yaʕni agdar aṣiiḥlak* ***il-tiim-laaytung maalti*** *aw ayy waaḥid, ʕaad ija šaxiṣ min* ***fariiq il-ʕamal maalatna****, ḥiča wiyyaa šaafa aḷmaani, yaʕni raʔsan rajjaʕli il-faartsuugšaayn*[71] *wa la dagg ismi wa la nṭaani waṣil w laa ayy šii*

'And then he said to me, 'What are you doing here? Do you live in Nuremberg?' Then I said, "Why are you asking me this strange question?" Then he said, "We are police officers, we have the right to ask." Then I said, "OK, this is my work, right next to me, and if you need anything, I can call **my team leader** or someone for you." After that, a person from **our team at work** came up to me and he saw that he was German. Then he immediately gave me back my vehicle registration document and neither entered my name nor gave me a receipt or anything else.'

The descriptive analysis indicates that a significant frequency of analytic genitive usage incorporates the *maal* with pronominal suffixes. Among older speakers, this construction constitutes 33.33% of analytic genitive usage (5 *maal*+PRO out of 15 tokens per 10,000 words). In contrast, younger speakers demonstrate a higher propensity for this usage, with 45.45% of analytic genitive constructions using *maal* with a pronominal suffix (10 *maal*+PRO out of 22 tokens per 10,000 words). The following examples show possession with and without *maal* in my data:

[71] Here, the German borrowing *Fahrzeugschein* ('vehicle registration document') is used.

(40) *yaʕni fraankfoort min iṭṭubb* ***li-l-ištaad maalatha*** *tḥiss inta mu b-aḷmaaanya*

‘If you walk into the Frankfurt's city center, you feel like you're not in Germany.’

(41) ***šahaayidti*** *bi-l-ʕiraaq ma gidarit ajiibha b-sabab* ***ʕaaʔilti*** *hnaa kulhum ma ʕindi aḥḥad bi-l-ʕiraaq mumkin.*

‘My certificates are in Iraq, I couldn’t bring them here because of my family who is here, I don't have anyone in Iraq currently.’

In further exploring the usage of *maal* with nouns, we observe that a significant number of occurrences aligns with the common noun-genitive construction, where *maal* is paired with nouns. Among the older speakers, 66.67% (10 out of 15 tokens per 10,000 words) of the instances featuring *maal* are in conjunction with nouns. In comparison, younger speakers show a similar tendency for this construction, with 54.55% (12 out of 22 tokens per 10,000 words) of *maal* occurrences involving nouns.

An interesting and unexpected variant use by both age groups is the usage of *maal* in verbal constructions, specifically when the noun has been previously mentioned or implied in the context. This form (VERB + *maal* or *maal* + VERB), is used in cases where the noun is referenced indirectly, as in possessive contexts like ‘hers’ or ‘theirs’, or when the noun is omitted entirely. An example provided showcasing this construction’s role in conveying possession or association without directly repeating the noun:

(42) *it-taʔmiin iṣ-ṣaḥḥi yixtilif* ***maal*** *abu l-amt*[72] *w-il-ḍariiba tixtilif.*

‘The health insurance of a civil servant is different and the tax is different.’

The two examples below demonstrate the use of *maal* to provide detailed explanations. Examples (43) and (44) used by a young male Iraqi speaker include a lengthier construction to clarify a complex description effectively:

[72] In the speech data collected from my participants, the genitive form *abu* 'father' is not frequently used (mainly to refer to a person who works somewhere).

(43) *haaða baladi θ-θaani, wu yubqa baladi l-uṃṃ š-wakit ma aaxuð ij-jinsiyya aruuḥ ziyaara uw arjaʕ okay,* ***bass maal arjaʕ aʕiiš bi-l-ʕiraaq****, baʕad la*

‘This is my second country and it remains my homeland. As soon as I have the [German] citizenship, I’ll visit and come back, okay. But as for living in Iraq again, certainly not.’

(44) *yaʕni hamm awsbildung muḥaasib ib-****šarikat [name] maal, aa, mawaad binaaʔ w-inšaaʔ****.*

‘I mean, also a training as an accountant at the company [name] for, uh, construction materials.

6.1.4.3.2 maal + German borrowing

An additional significant category highlighted includes the occurrence of the analytic genitive construction with German nouns. This observation aligns with findings from Owens (2005a), Boumans (2006) among others, where a common trend across these studies is the obvious preference for the analytic form, particularly when incorporating lexical items from other languages into the genitive construction. The analysis underscores the integration of German loanwords within the framework of *maal* genitive constructions. This is exemplified in various instances:

(45) *ib-xamsa w ʕišriin yooro w ikammla, iḥiṭṭa bi-****l-firin maal il-bakaraay***

‘For 25 euros and he prepares it. He puts it in the oven of the bakery.’

(46) *qabil činna niltiqi bi-****l-qaaʕa maalt il-kamb***

‘We used to meet in the camp hall.’

Older speakers show a usage rate of 13.33% (2 out of 15 cases) for analytic genitives with German borrowings, whereas younger speakers demonstrated a higher rate of 22.73% (5 out of 22 cases), indicating a greater tendency among the younger speakers to use the analytic genitive construction with German loanwords. Contrastingly, the use of *Iḍaafa* with German borrowings was significantly less prevalent, with older speakers at 1.26% and younger speakers at a mere 0.45%.

6.1.4.3.3 Statistical Analysis of maal

In the analysis of 1,213 genitive constructions in the Iraqi corpus (raw data), a generational shift in the use of the possessive marker *maal* becomes evident, with a statistically significant difference (p = 0.01). Younger speakers use *maal* in 17.9% of cases (22 tokens per 10,000 words), compared to just 8.7% among older speakers (15 tokens per 10,000 words), making them approximately 2.23 times more likely to use *maal*. Gender differences, by contrast, are minimal. See the following figure for details:

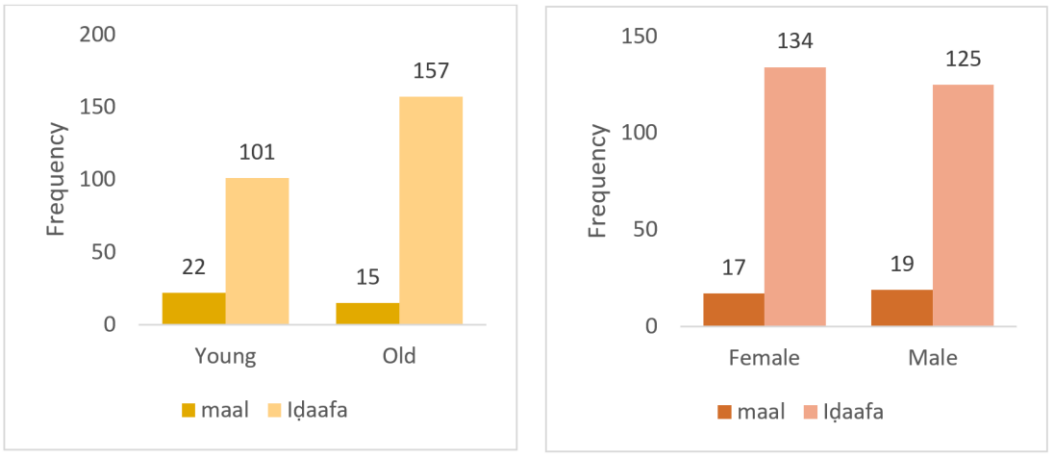


Figure 17. *Normalized Frequencies of maal and Iḍaafa Among Iraqi Speakers (Age and Gender)*

The mixed model's findings, with significant p-value of 0.0001, indicate that the presence of German borrowings has a considerable positive effect on the usage of *maal*. Moreover, the usage of *maal* slightly increases in individual interviews, where it was used 13.1% of the time (18 tokens per 10,000 words), compared to 8.3% in group conversations with Syrians (17 tokens per 10,000 words). Although this difference is not statistically significant, it highlights a trend where *maal* is more frequently used in one-on-one interactions, as shown in Figure 18:

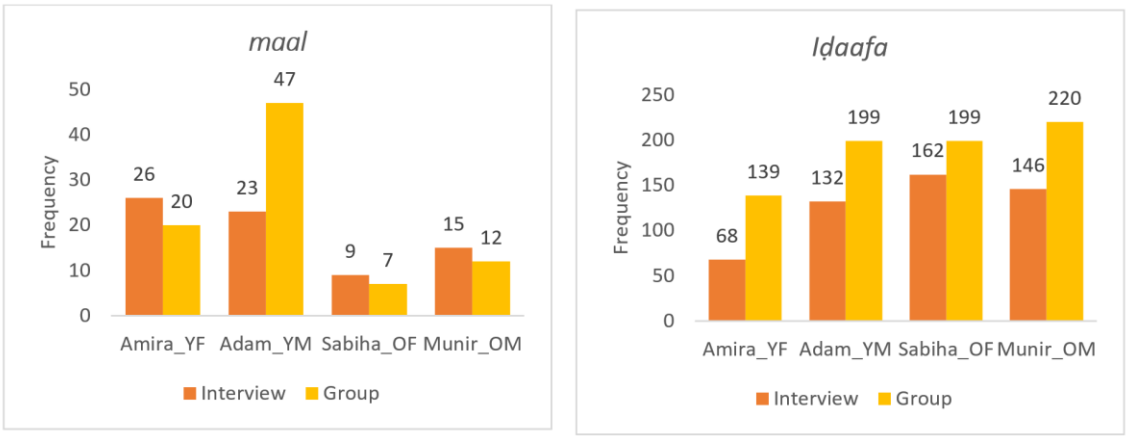


Figure 18. *Comparison of maal and Iḍaafa in Individual vs. Group Conversations Among Iraqi Speakers (Normalized Frequencies for Each Speaker)*

When focusing on the participants who took part in both conversational contexts, distinct patterns emerge in the choice between *maal* and *Iḍaafa*. The young female participant, Amira, shows a notable decrease in her use of *maal* when shifting from individual to group settings. In individual interviews, she uses *maal* in 27.66% of cases (26 out of 94 tokens), dropping to 12.58% (20 out of 159 tokens) in group conversations. In contrast, the young male participant, Adam, increases his use of *maal* in group discussions, rising from 14.84% in individual settings (23 out of 155 tokens) to 19.11% (47 out of 246 tokens) in group contexts. Among older participants, the patterns vary slightly. The older female speaker maintains a relatively stable use of *maal*, with 5.26% in individual interviews (9 out of 171 tokens) and a slight decrease to 3.40% in group settings (7 out of 206 tokens). The older male speaker shows a more pronounced reduction, using *maal* in 9.32% of individual sessions (15 out of 161 tokens) compared to 5.17% in group conversations (12 out of 232 tokens). Although these patterns suggest meaningful trends, the observed differences are not statistically significant.

6.1.4.4 *tabaʕ*: Variationist Results

In the analysis centered on *tabaʕ*, the data (N = 1,322 genitive constructions in the Syrian corpus) reveal a clear variation in usage across age groups: older Syrian speakers use *tabaʕ* in only 2.29% of genitive constructions (5 out of 218), whereas younger speakers show a

higher rate, using *tabaʕ* in 7.75% of genitive constructions (11 out of 142). The following example show the usage of *tabaʕ* (47) and *Iḍaafa* (48):

(47) *masalan mamnuuʕ tiṭlaʕ baʕd iš-šiġil, masalan maʕ hal* ***il-šaġiil tabaʕak*** *illi yištiġil maʕak*

'For example, it is not allowed to go out after work, for example with one colleague of yours who works with you.'

(48) *yaʕni ṭariiʔa* ***isimha*** *il-ṭariiʔa il-amriikiyye bi-****t-taʕliim il-luġa***

So, it's a method called the 'American method' in language teaching.

While the main focus of this analysis is on the usage of *tabaʕ* vs. *Iḍaafa*, it is relevant to examine the occurrences of *tabaʕ* in conjunction with pronominal possessors as opposed to its instances with nouns. Subsequent sections will provide a detailed overview of these cases, extending to the employment of *tabaʕ* with German lexical items. Section 6.2.4.4.3 will provide a statistical comparison to explain the relative frequency of *tabaʕ* and *Iḍaafa* among the different age groups and different conversational contexts.

6.1.4.4.1 tabaʕ with PRO

Turning the focus to the Syrian group, we explore the use of *tabaʕ* within genitive constructions, distinguishing between pronoun versus noun possessors and examining rare constructions. Examples from the data:

(49) *šaġlit il-koroona waʔaf* ***n-naadi tabaʕhun*** *b-noob ktiir*

'The corona pandemic then stopped their gym in its tracks.

(50) *halaʔ baʕməl awsbildung, hayy diraasit* ***il-mihne tabaʕi***

'Now I'm doing an apprenticeship, that's my profession studies.'

(51) *hiyye b-ʕimir banaati fa hiyye miʕtibritna mitel* ***ʕeeʔilitha*** *hoon*

'She is the same age as my daughters, so she sees us as her family here.'

Moreover, the data on Syrian Arabic shows that speakers combine *tabaʕ* with *Iḍaafa*:

(52) *wlaadi byiʕtimdo ʕala ḥaalhon fa ma ʕindi hayy* ***il-miškile tabaʕ ənnu wlaadi***

‘My children rely on themselves, so I don’t have this problem with my children.’

The distribution of *tabaʕ* followed by pronouns versus nouns shows distinct preferences based on normalized frequencies (per 10,000 words). Among older Syrians, 60% of *tabaʕ* constructions involve pronouns (3 out of 5), while 40% involve nouns (2 out of 5). Younger Syrians use pronoun forms less frequently, with 45.45% involving pronouns (5 out of 11) and 54.55% involving nouns (6 out of 11). Unlike the Iraqi group, there are no instances of *tabaʕ* combined with verbs in the Syrian data. Both older and younger speakers show a single normalized occurrence of *tabaʕ* used alongside an *Iḍaafa* structure, indicating its rarity. Additionally, there are two normalized instances where *tabaʕ* is combined with a possessive pronoun, marking a specific usage pattern within this demographic.

6.1.4.4.2 tabaʕ + German Borrowings

In the Syrian data, the usage of *tabaʕ* with German borrowings was notable, as demonstrated in the following instances:

(53) *ma fitit* ***koors luġa***
‘I didn't take a language course.’

(54) *iṭṭarit hiyye tsaafir ʕa-****l-urlaaub tabaʕ iṭaalia***
‘She wanted to go on the Italy vacation.’

(55) *laʔinnu haada kaan yaʕni, yaʕni* ***il-vunš tabaʕa***
‘Because that was her wish.’

Older participants show limited use of *tabaʕ* combined with German borrowings, accounting for only 5.56% (1 out of 18) of their genitive constructions. In contrast, younger speakers exhibit a stronger preference, with 37.84% (14 out of 37) of their genitive instances involving *tabaʕ* with German loanwords. This contrasts with the relatively low rates of *Iḍaafa* combined with German borrowings among both older (1.10%) and younger speakers (1.57%). As with all quantitative findings in this study, these figures are based on normalized frequencies per 10,000 words, which explains the relatively low absolute values. The younger group's marked use of *tabaʕ* in this context signals a generational shift toward integrating German lexical items into possessive constructions.

6.2.4.4.3. Statistical Analysis of tabaʕ

In this subsection, I investigate the use of the analytic genitive *tabaʕ* across 1,322 genitive constructions in the Syrian corpus (raw data). The findings reveal distinct preferences based on age: older Syrian speakers use *tabaʕ* in 2.29% of genitive cases (5 out of 218), while younger speakers use it more frequently, in 7.75% of cases (11 out of 142). Although gender generally plays a secondary role in this analysis, it was included to identify any notable deviations. The results show a marked contrast: female speakers make minimal use of *tabaʕ*, accounting for just 0.52% of their genitive constructions (1 out of 192), whereas male speakers display greater variation, using *tabaʕ* in 7.51% of cases (13 out of 173), as illustrated in the following figure:

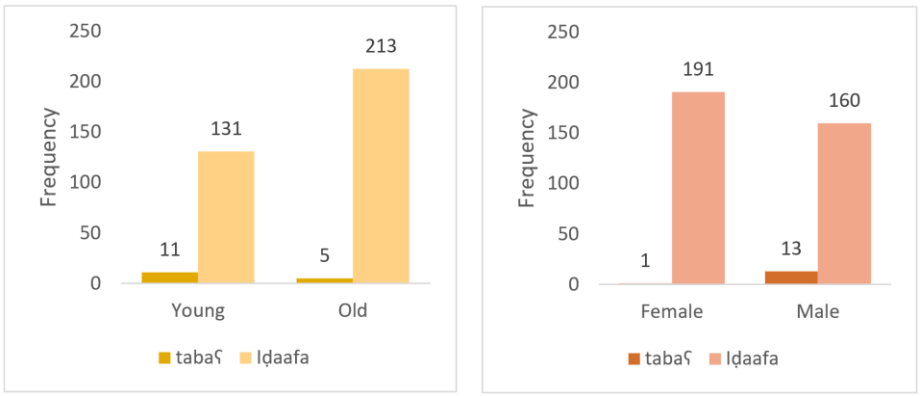


Figure 19. *Normalized Frequencies of tabaʕ and Iḍaafa Among Syrian Speakers (Age and Gender)*

Despite the low token counts[73], which are – as already mentioned –normalized per 10,000 words, statistical analysis highlighted age as a significant factor with younger speakers are approximately 4.58 times more likely to use *tabaʕ* compared to older individuals ($p = 0.021$). Gender also emerges as a significant factor ($p = 0.000456$), with male speakers over 13 times more likely to use *tabaʕ* than female speakers. These findings underscore the strong influence of both age and gender on genitive construction choices. The model additionally tested the use of *tabaʕ* with German borrowings as an independent variable to assess whether borrowings significantly affect its usage. The results reveal a positive effect, supported by a highly significant p-value ($p < 0.0001$).

Turning to the conversational context, it also appears to influence the use of *tabaʕ* (see Figure 20). In group discussions, *tabaʕ* occurs in 5.96% of genitive constructions (9 out of 151), while in individual interviews, it appears less frequently at 3.74% (7 out of 187). However, statistical analysis shows that the effect of conversational setting is limited. The non-significant p-value indicates that the context – whether individual or group – does not meaningfully influence speakers' choices between *Iḍaafa* and *tabaʕ*.

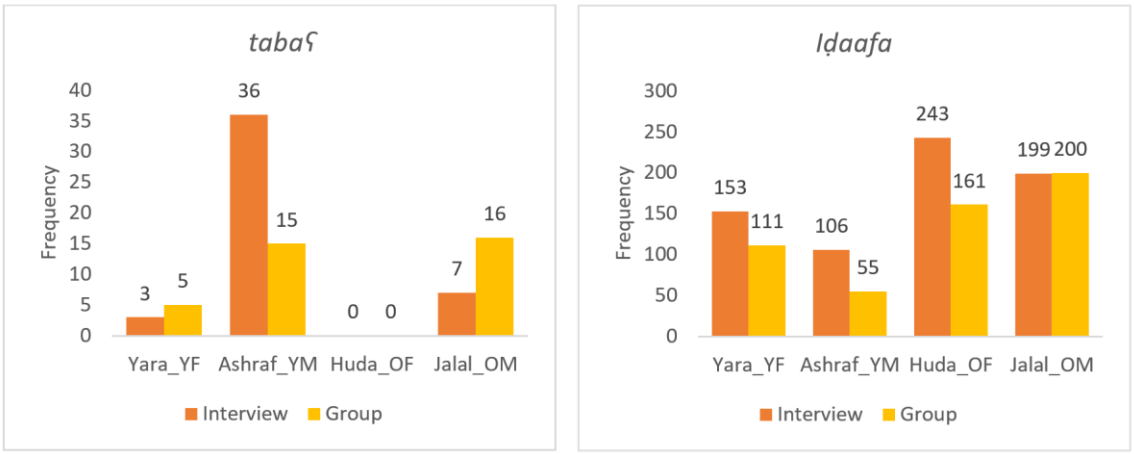


Figure 20. *Comparison of tabaʕ and Iḍaafa in Individual vs. Group Conversations Among Syrian Speakers (Normalized Frequencies for Each Speaker)*

Upon closer examination of individual patterns, distinct tendencies emerge across age and gender. The young male speaker, Ashraf, shows a relatively balanced use of both forms. In individual interactions, he uses *tabaʕ* in 25.35% of genitive constructions (36 out of

[73] Although the raw token count for *tabaʕ* among Syrian speakers is very low – raising limitations for statistical modeling – this scarcity is itself a meaningful result. It highlights a clear distributional contrast with the Iraqi data, where *maal* occurs significantly more frequently.

142), while *Iḍaafa* accounts for the remaining 74.65% (106 out of 142). In group settings, *tabaʕ* occurs in 21.43% of cases (15 out of 70), with *Iḍaafa* making up 78.57% (55 out of 70). In contrast, the young female speaker, Yara, demonstrates a clear preference for *Iḍaafa*. In one-on-one interactions, *tabaʕ* appears in only 1.92% of instances (3 out of 156), while *Iḍaafa* dominates at 98.08% (153 out of 156). This trend continues in group discussions, where *tabaʕ* accounts for just 4.31% (5 out of 116), and *Iḍaafa* for 95.69% (111 out of 116). Jalal, the older male speaker also leans strongly toward *Iḍaafa* in both contexts. In individual interviews, *tabaʕ* is used in 3.40% of cases (7 out of 206), and *Iḍaafa* in 96.60% (199 out of 206). In group conversations, the proportion of *tabaʕ* rises slightly to 7.41% (16 out of 216), while *Iḍaafa* remains dominant at 92.59% (200 out of 216). Most strikingly, the older female speaker, Huda, exclusively uses *Iḍaafa*, with no occurrences of *tabaʕ* in either setting. In conclusion, while Ashraf demonstrates a relatively balanced use of *tabaʕ* and *Iḍaafa*, the young female and the older speakers – especially the older female – show a strong and consistent preference for *Iḍaafa*.

6.1.4.5 Interim Conclusion

The mixed-effects model applied to both Iraqi and Syrian groups revealed that age significantly impacts the usage of *maal* and *tabaʕ*. Specifically, the use of German borrowings, reflecting the nature of the possessor, exerts the most significant effect across both groups, with exceptionally low p-values ($p < 0.001$) highlighting the profound integration of German lexical items. This trend is particularly marked by a generational preference in Syrian speakers, where younger participants increasingly favor the analytic genitive with *tabaʕ* over the more traditional *Iḍaafa* construction, differing notably from older speakers who show a declining usage with age. In the Iraqi data, this age effect is similarly pronounced, indicating less use of German borrowings among older speakers. These findings align with previous studies' findings regarding a preference for the analytic form, particularly when incorporating lexical items from other languages (Boumans 2006; Owens 2005a; Sayahi 2015).

Gender differences also manifest themselves distinctly in the Syrian group, with a significant disparity in language use between males and females, a pattern not observed in the Iraqi group. Additionally, while the type of conversational context (group versus individual settings) hinted at potential adaptive shifts in language use among Iraqis, it did not

significantly influence the Syrian group. The analysis also highlighted that Iraqi speakers, in group contexts, showed strong tendencies towards levelling of *maal* and frequent use of *Iḍaafa*.

6.2 Sociolinguistic Variation among Iraqi speakers

After thoroughly examining variables relevant to both Iraqi and Syrian Arabic, I now focus on variationist aspects within the Iraqi sample. I will single out two distinctive characteristics of Iraqi Arabic: the pre-verbal marker *da-* and the variants [č] and [k] for the realization of (k). Initially, I will introduce these features and analyse their usage in Iraqi interview data, followed by their application in mixed conversational settings. Additionally, I will draw a brief comparison with the phoneme (q), typically realized as [g] or occasionally as [q] by Iraqis, and as [ʔ] by Syrian speakers. This comparison aims to discern whether Iraqi speakers predominantly standardize their speech or if their linguistic accommodations are influenced by other factors.

6.2.1 prefix *da-*

Given the comprehensive discussion of this variable in Adnan and Owens (2025), I will give an overview of *da-* with examples from the joint article and provide afterwards additional examples used by the participants without further elaboration. It is worth noting that the examples presented in Section 6.2.1.1 are extracted from my Iraqi corpus. Subsequently, I will proceed with the quantitative analysis of this variable.

In Baghdadi Arabic, the prefix marker *da-* has been traditionally viewed as equivalent to the imperfect verb markers seen in other Arabic dialects. For example, *b-* is used in Cairene and Syrian Arabic, and *ka-* is found in Moroccan Arabic (Clarity et al. 2003; Erwin 2004; Holes 2016 for Bahrain). Erwin (2004) points out that *da-* indicates actions that are ongoing, repeated, or habitual. Arabic is known for its assortment of imperfect pre-verbal prefixes, each serving diverse grammatical purposes.[74] Similarly, *da-* has been

[74]Some examples include the Classical Arabic *sa-*, *ha-*, *laħ*, *raħ*, *ɣa*, and others found across various regions like the Levant, Iraq, Egypt, and Morocco. The prefix *ka-* in Moroccan Arabic acts as a marker indicating duration, progression, or repetition (Harrell 2004).

likened to the *bi-* prefix in Syrian and Cairene Arabic, with Erwin (2004) emphasizing its use in representing continuous or habitual actions.

Scholars like Cowell (2005), Blanc (1964) and Abu-Haidar (1991) have pointed out the flexibility of *da-*, suggesting its meaning can change based on its context, from expressing desires to indicating intentions. Blanc (1964, p. 116) observed that Muslim-Baghdadi often uses the imperfect without the *da-* prefix, suggesting it might play a pragmatic role, hinting at a procedural usage, as opposed to a propositional one, like *b-*. However, a central point is the need to approach *da-* with a broader view of its practical use, rather than a prioristically trying to assign it specific meanings. This research by Adnan and Owens (2025) indicates that *da-* is not frequently used by Iraqi speakers. Their findings alone suggest that the limited instances of *da-* in their corpus mean its function differs from the grammaticalized *b-* indicative marker known from Syrian or Cairene Arabic. It is challenging to establish a strict, rule-bound characterization for *da-* given its role as a discourse marker. As can be seen in the following examples by Adnan and Owens (2025), there is no evident lexical or syntactic condition defining its use, showing that *da-* occurs in a wide range of parallel grammatical contexts. This is indicated in the following corpus-based examples (see also Adnan and Owens 2025, p. 166—167):

(56) **Dependent Clauses**

Adverbial

a-ruuḥ	*a-rtaaḥ*	*leen*	*ẓahr-i*	*šwayya*	***da**-y-oojaʕ-ni*
I	I-rest	because	back-my	a-bit	*da*-3-hurt-me

'I'm going to rest because my back starts to hurt a bit.'[75]

(57) **Relative Clauses**

huwwa (...)	*ka-niẓaam*	*illi*	***da**-n-soolif*	*bii*	*nafsa*	*muqaaranatan*
he	as-system	which	*da*-we-talk	about	same	compared

maʕa	*l-ʕarabiyya,*
with	the-Arabic (one)

'Like the system that we're talking about, is the same compared to the Arabic one.'

(58) **After *kaan***

čin-it	***da**-a-ntiḍir*	*il-biruufšuule*	*maalt-i*
was-I	*da*-I-wait	the-vocational-school	of-my

'I was waiting for my vocational school (German 'Berufsschule')."

(59) **Negative**

ma	***da**-t-kaffi,*	*ḥaalaat*	*kulliš*	*ihwaaye*
not	*da*-3F-be-enough	cases	very	many

'It is not enough, there are very many cases.'

(60) **Verb Classes**

a. Intransitive

aṣdiqaaʔ-i	illi	***da**-a-twaaṣal*	wiyyaa-hum
friends-my	who	*da*-I-communicate	with-them

'My friends with whom I communicate.'

b. Transitive

iḥna	***da**-n-waajih*	*šwayya*	*ṣuʕuuḅa*
we	*da*-we-face	little	trouble

'We are facing a little trouble.'

c. Modal

git-t-l-a	bas	ma	***da**-a-gdar*
told-I-to-him	but	not	*da*-I-can

'I told him but I cannot'

The use of *da-* in discourse is not very common, and its primary purpose is to emphasize or spotlight a specific event, particularly when the speaker wishes to draw attention to the

[75] In this scenario, where a speaker might state their back hurts, the use of *da-* could be implying the length of an interview, possibly suggesting a desire to end it.

urgency of a matter or to underline its relevance to the topic of discourse (see also Owens and Young 2007, p. 149). Here is an illustration using the following example by Erwin (2004, p. 139):

(61) *il-ḥanafiyya* ***da****-t-naqqiṭ*
DEF-faucet *da*-F-drip
'The faucet is dripping'

In a hypothetical scenario, if a husband walks into the kitchen and his wife expresses the above statement, the use of *da-* is not merely about stating the fact. More tha this, with the inclusion of *da-*, she is indirectly implying that she would like him to take action to rectify the dripping faucet. This implication, rooted in Gricean terms, indicates that communication often carries meaning beyond the literal words spoken. If *da-* were omitted, the statement would simply be a casual observation about the faucet's current condition or its regular behavior. Through the use of *da-*, the statement takes on a more nuanced meaning, suggesting an implicit request for action. It is essential to note that this is not a direct command (as it would be unreasoned to command the faucet to fix itself).

In Adnan and Owens (2025), we argue that Arabic prefixes like *da-* function as discourse particles that connect speech to previous conversational content. This concept aligns with Grice's dictum, "senses are not to be multiplied beyond necessity" (Grice 1989, p. 47), suggesting that discourse elements should be as economical as possible. This minimalist view highlights these particles' role in prompting listeners to draw inferences about the discourse, speaker attitudes, and interpersonal dynamics. Support for this interpretation comes from Fox Tree and Schrock (2002), and Owens and Rockwood (2008), with Fraser (1990) providing a comprehensive treatment of discourse markers. In this framework, 'ya know' invites listeners to deduce implicit meanings and can indicate transitions, emphasis, or known information, with these functions stemming from its inferential power rather than its literal meaning (Fox Tree and Schrock 2002, p. 737). The context-sensitive nature of *da-* is similar to discourse markers in other languages. Based on these insights, the main role of *da-* seems to be that of indicating important shifts in discourse. It guides the listener to relate the *da-* marked predicate to recent conversation elements, acting more as a discourse indicator than a traditional modal or aspect marker. This perspective provides a

unified explanation for the diverse uses of *da-*, underlining its importance in marking changes within dialogues.

To be sure, in addition to its interpretation as a prefix of the same order as *b-*, other individual meanings have been suggested for it. Blanc (1964, p. 116) views it as an optative, while others associate it with indicating purpose or intention (Bar-Moshe 2017, p. 166). Another perspective sees it as a tool for introducing an indirect question or command (Abu-Haidar 1991, p. 89). However, challenges arise when trying to fit these definitions to every example. For instance, some examples in the corpus, such as ***da****-agdar* (see example 30c.), do not align perfectly with these categories. While specific definitions may match particular instances, as in Blanc's description with *xal-**da**-n-guul* 'let's say' (1964, p. 116), they do not consistently cover all uses of *da-*. Rather than categorizing *da-* in a fixed modal or aspectual category, its varied usage hints at a broader range of meanings. Context plays a crucial role in determining its function.

6.2.1.1 Examples from the Data

The examples provided illustrate the diverse use of the particle *da-* in emphasizing shifts in topics, perspectives, and the significance of certain actions within conversational contexts. In the following, more examples will be given from my data, before moving to the statistical analysis.

In the first scenario (62), the particle *da-* marks a turn in the discussion, as the speaker introduces a new subject matter.

(62) *yaʕni aani aani axiðt šahaadti ʕuluum ḥaasibaat, xibirti ṣinaaʕat asnaan, hasse **da-adrus** industriimišaaniker yaʕni, miikaaniik ma ṣ… ṣiinaaʕi, bass lee… leeš **da-adrushe**, leeš haaði, leenu aani haay il-mahne l-miikaaniik ib-ṣuure ʕaame aḥibb*

'I mean, I, I have a certificate in computer science, my experience is in dental manufacturing, now **I am studying** industrial mechanic, so mechanics for...industrial, but why **am I studying** this, why this, because I like this profession of mechanics in general.'

By using *da-*, the speaker signals a shift towards a specific and relevant topic. This case highlights the speaker's transition from his background to his current ambitions, emphasizing his decision to pursue a career in Germany despite the inapplicability of his Iraqi certificate. The use of *da-* here underlines a change in content and perspective, specifically pointing out the speaker's shift from his past in Iraq to his present and future in Germany.

The narrative moves from a general overview of his qualifications and experiences to the specific choice of studying industrial mechanics, underscoring the importance of this new direction in his professional journey.

The second example (63) further exemplifies *da-* as a focus marker, placing emphasis on actions that carry significance or urgency within the discourse.

(63) *šaxiṣ **da-yʕiiš** b-il-balad uw ʕinda awraaq (...) **da-yšuufuu**, **da-yraaqbuu** daaʔirat il is-sosyaal aw ij-joobsenter **da-yraaqbuu da-yšuufuu** taḥarukaata yaʕni*

‘A person who **lives** in the country and has documents (…) the social authority or the job center **see** and **watch him/her**, they **watch** and they **see him/her**, his movements/activities.’

In this instance, the speaker discusses the constraints faced by asylum seekers in becoming self-employed, despite possessing the necessary work experience and financial capability. The repeated use of *da-* before verbs in this context serves to highlight the speaker's criticism towards the German bureaucratic system. It draws attention to the repetitive and scrutinizing actions of social authorities and the job center, marking a critical stance on their part in observing the movements and endeavors of individuals within the system. This emphasis not only underscores the speaker’s critique but also brings to light the relevance of these actions in the broader discourse on the challenges faced by asylum seekers.

Both examples collectively showcase the strategic deployment of *da-* in conversation to signal shifts in topic, highlight new focal points, and underscore the significance of certain actions or decisions. Whether marking a transition in narrative perspective or accentuating critical commentary on systemic issues, *da-* plays a crucial role in structuring discourse and guiding listener attention to the elements deemed most pertinent by the speaker.

6.2.1.2 Variationist Results

This section examines the use of the *da-* prefix, with a total of 197 tokens identified in the raw corpus data. Normalized frequencies show that older participants use the prefix 32 times, while younger speakers use it only 15 times. Statistical analysis indicates that older speakers are approximately 2.28 times more likely to use the *da-* prefix than younger ones, a difference that is statistically significant ($p = 0.045$). In contrast, no significant gender-

based differences were found in the use of *da-* between male and female speakers (see Figure 21).

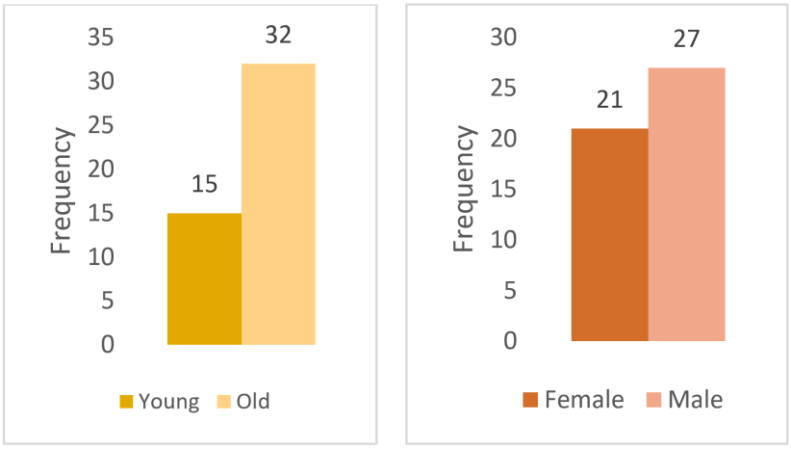


Figure 21. *Normalized Frequencies of da- among Iraqi Speakers (Age and Gender)*

While the analysis provides a general overview of the influence of age on the use of the *da-* prefix, it is important to consider individual variability among speakers. Particular patterns emerge from the participants. The two youngest male speakers, Amira and Adam, use it the least. Additionally, among the younger participants, it is notable that a young female speaker and her young sister-in-law show the highest usage. They predominantly use the *da-* marker during narratives, aligning with findings from studies on discourse markers in narrative contexts (see examples (62) and (63) above). On the other hand, the marker is most frequently used by the two old male speakers in my study whose frequent usage of *da-* was noticeable.

Moreover, the findings suggest that the conversational setting significantly impacts the use of the *da-* prefix, which is approximately 21% less likely to be used in group conversations compared to individual settings ($p < 0.0001$). This observation holds across different age groups, with older speakers like Sabiha and Munir, and a younger female speaker, Amira, all showing a reduction in the use of the *da-* prefix in group settings. Adam, the young male speaker, is an exception, showing no significant reduction but rather an increased use, as shown in Figure 22.

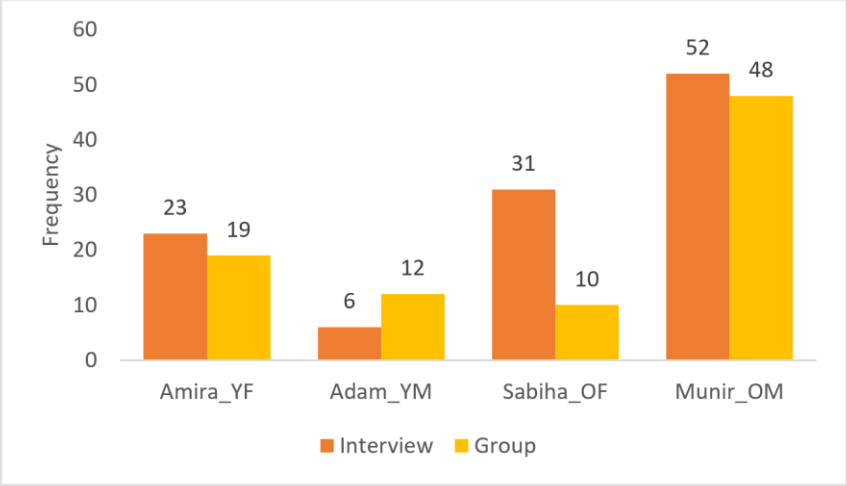


Figure 22. *Comparison of da- in Individual vs. Group Conversations among Iraqi speakers (Normalized Frequencies for Each Speaker)*

It is important to note that Sabiha and her daughter Amira spent two years in Syria and five years in Egypt before settling in Germany. Munir, on the other hand, has had extensive interaction with Arabic speakers from various regions due to his work in Iraq, and spent three months in Syria before moving to Germany. In contrast, Adam had limited engagement with other Arabic-speaking communities prior to the interviews.

6.2.2 Variable (k): [č] vs. [k]

This chapter focuses on the analysis of the variants [č] and [k] within the Iraqi corpus, particularly on the usage of [k] in words where [č] is typically expected. Here, the variable (k) is analysed in terms of presence or absence of [k]. In the study of Iraqi Arabic, particularly the Baghdadi variety, the variable consonant /k/ (ك) serves as a compelling subject for phonological analysis. This Iraqi feature was already described in Section 4.1.3. Nevertheless, in the following, an overview and examples will be given. [k] may undergo a distinct transformation in specific linguistic environments (Erwin 2004, p. 6) and may be replaced by the voiceless palatal affricate /č/ (چ), in a palatalization process (Erwin 2004, p. 10).[76] The likelihood of /k/ to morph into /č/ increases in proximity to front vowels, such as /i/ ـِ or a front variant of /a/ ـَ or /aa/ ـَا . This is shown in the following examples:

[76] In certain eastern Arabic dialects, historical /k/ has been affricated to [ʧ] or [ʦ], particularly when preceding front vowels [i], [e], [a], or, in some cases, a high back vowel [u]. Currently, these affricates are transitioning back to the velar stop [k], as observed in instances like *ʧam* 'how many?' evolving into *kam* in Sūf, Jordan (Al-Wer et al. 2022, p.25).

(64) *bič̌a* ‘he cried’

č̌aan ‘he was’

aani gilt-l-ič̌ ‘I told you (F)’

To see that the change is phonological, lexical forms with a back vowel to not undergo palatalization. This can create split paradigms within the same lexeme, e.g. *č̌init* ‘I was’ < *kinit) vs. *ikuun* ‘he is’ (Owens and Young 2007, pp. 153–154).

It is relevant to note that the sociolinguistic variation described below has been documented in numerous sociolinguistic studies on Saudi Arabian and Gulf Arabic. For instance, Al-Rojaie (2013) identifies palatalization patterns in the dialects of Central and North-Central Arabia, notably in the Qasīm province, where [g] and [k] can manifest as affricate and dental variants [t͡s] and [d͡z]. This phenomenon is shaped by both linguistic and social factors, including age, gender, and level of education. Similarly, Al-Azraqi (2007) and Al-Essa (2009) observe that in Riyadh, a significant shift from [t͡s] to [k] reflects a broader trend of phonological levelling. This transition is especially pronounced in the second-person feminine suffix, where [k] usage is highest among Riyadh speakers compared to other cities. These findings suggest that the transition to /k/ in Najdi may be a result of an ongoing levelling process that has originated and progressed in Riyadh.

6.2.2.1 Examples from the Data

To identify words with a notable frequency of the /k/ sound, a comprehensive examination of all occurrences was conducted, resulting in a list of the most frequently used verbs. Topping this list is the verb *kaan* (‘he was’), equivalent to *č̌aan* in Iraqi Arabic. Following closely is the adjective *kbiir* (‘big’), featuring various forms such as *kibiir(a)*. In Iraqi Arabic, the corresponding forms would be *č̌ibiir(a)*. To illustrate these findings in greater detail, Table 16 provides a list of instances where the [k] sound appears in contexts where [č] would typically be expected by the Iraqi participants:

Used word with /k/	*Iraqi variants with /č/*	*Translation*
kaan, kaanit/kaanat, kinit kinna/kunna kinti, kaanaw	*čaan, čaanit/čaanat, činit činna, činti, čaanaw*	was
kabiir kibiir/kibiira kbiir/ kbiira ikbiir/ ikbiira	*čibiir/ čibiira*	big
yiḥki, niḥki	*yiḥči, niḥči*	he says, we say
aḷḷah yʕiinik	*aḷḷah yʕiinič*	May God help you (F).
maʕik	*maʕič/* more common: *wiyyaač* [77]	with you (F)
kamm	*čamm*	how much/many?
heek	*hiič*	like this
samak	*simač*	fish (plural)
sikkiine	*saččiine*	knife
ikfuuf	*ičfuuf*	gloves
iktaafna	*ičtaafna*	our shoulders

Table 16. *List of [k] cases where [č] was Expected to be Used by Iraqi participants*

During mixed-group discussions involving Iraqi and Syrian participants, a recurrent theme was the distinctive use of the phonetic feature /č/ in Iraqi Arabic, which participants from both groups frequently commented on. A young Iraqi female participant shared her experiences and perceptions:

> When I came here [to Germany] I faced no significant language barriers. I even spoke Syrian with my friends at school. They even asked me 'Are you from the Shaam?', I tell them 'No, I'm Iraqi', they didn't believe me that I was Iraqi.

Moreover, she compared the Syrian dialect with the Iraqi one by describing it contrastively:

[77] Refer to section 6.1.3. for a detailed discussion on *wiyya*.

> In my opinion, it's a very **smooth** language, something **fine** and **beautiful**. We [Iraqis] feel this way because our language has something, how should I put it, aggressive about it. For example, *siččiin*, something so harsh, but Syrian Arabic is not like that, so it's lovely and so, it's beautiful, I like it.

In contrast, a young Syrian female reflected on her initial and evolving impressions of the Iraqi dialect, mainly referring to terms with /č/ and the realization of */q/ and Iraqi Arabic vocabulary:

> I have to say something now… That I have heard Iraqi Arabic before. I feel that it is **very heavy**. […] But now for three four months I have been following an Iraqi YouTuber, and then after some time I already use some Iraqi words myself (laughing). First, I felt that the dialect felt **heavy**, but after a while it didn't anymore. Now I realized that the dialect gives **every word its right**. (*btaʕṭi la-l-kilme ḥaʔha*)

The conversations from the speakers highlight a diverse attitude towards /č/, demonstrating its perceived harshness in Iraqi Arabic compared to the smoother tones of Syrian.

6.2.2.2 Variationist Results

In the study of (k), I analysed 1,570 tokens of the phonemes [k] and [č] to understand usage patterns among Iraqi speakers. Since [č] is the normative variant, particular attention was given to cases where [k] appeared instead. Among older participants, [k] is used in 9.83% of relevant contexts (17 out of 173 tokens), while younger speakers show even less frequent use, at 3.32% (7 out of 211 tokens). According to the mixed-effects model, this suggests that older speakers are approximately 3.6 times more likely to use [k] than younger ones – a statistically significant difference ($p = 0.045$).

Particularly, young male speakers are noted for their distinctive choices, showing the least preference for [k] compared to young female speakers. While both genders demonstrate a similar tendency for [č] – with females using it 93.2% of the time and males 94.3% – the mixed model analysis reveal that gender does not significantly impact the choice between [k] and [č].

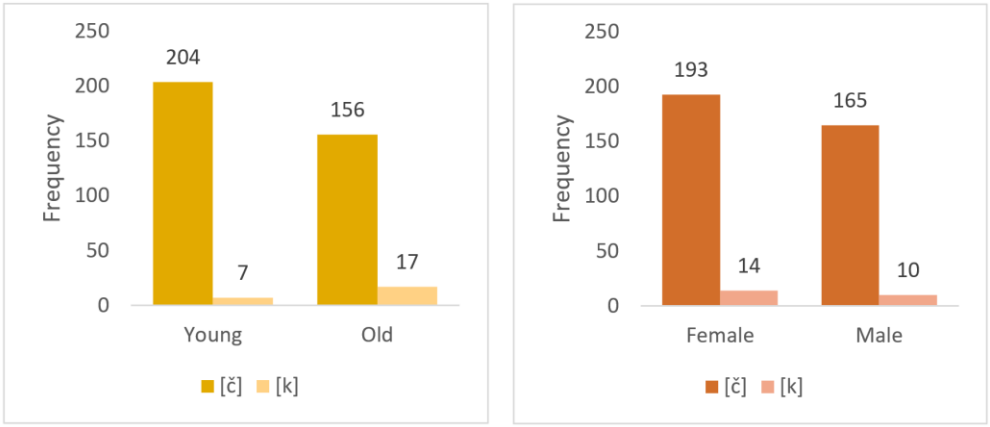


Figure 23. *Normalized Frequencies of [č] and [k] among Iraqi speakers (Age and Gender)*

Turning to the conversational contexts, the analysis shows that they significantly influence the choice of variant. In individual interviews, [k] appears only 8 times per 10,000 words (4.10%), while in group conversations its frequency increases to 35 instances per 10,000 words (20.59%). Statistical analysis confirms this difference, with a highly significant p-value ($p < 0.0001$), indicating that speakers are over 6.4 times more likely to use [k] in group settings than in individual interviews. This highlights the strong impact of group dynamics on the use of the less common [k] phoneme in Iraqi Arabic.

Referring to Figure 24, the older generation shows marked shifts in [k] usage across conversational contexts. In individual interviews, the older female speaker, Sabiha, uses [k] in only 2.40% of cases (4 out of 167), while in group discussions with Syrians, her use rises sharply to 25.48% (53 out of 208). Similarly, the older male speaker, Munir, employs [k] in 7.19% of utterances (12 out of 167) during individual sessions, increasing to 42.06% (45 out of 107) in group conversations. Notably, Munir spent three months in Syria, which may have influenced his linguistic adaptability.

Among younger speakers, Adam uses [k] only once in an individual setting and avoids it entirely in group interactions. In contrast, Amira shows a pronounced shift: she uses [k] in 12.15% of group utterances (22 out of 181), nearly double her individual interview rate. It is also noteworthy that both younger speakers tend to favor [č] more strongly in group settings. Taken together, the data do not point to a clear gender-based pattern in the use of [k] among participants. The following figures summarize these findings:

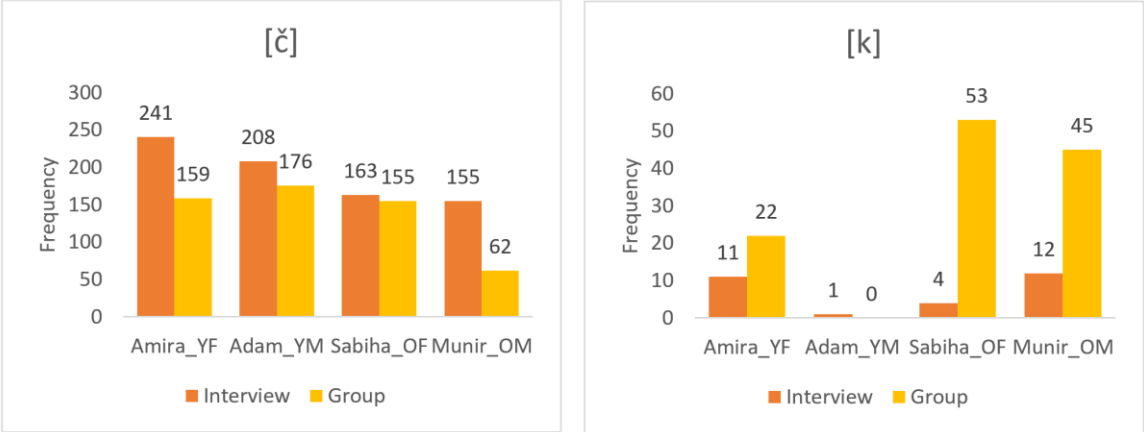


Figure 24. *Comparison of [č] and [k] in Individual vs. Group Conversations among Iraqi Speakers (Normalized Frequencies for Each Speaker)*

It is relevant to mention that Sabiha and her daughter Amira spent two years in Syria and five years in Egypt before moving to Germany, which may influence their linguistic choices. Also, Munir has had much contact with other Arabic-speaking people and worked with them while he was in Iraq. Adam, on the other hand, did not have much contact with other Arabic-speaking people until the time of the interview conduction. The observed adaptation in the usage of [k], especially among the older generation in group discussions with Syrians, can be explained through several linguistic and sociolinguistic factors and will be discussed in 6.2.3.

6.2.2.3 Brief Comparison to [g] vs. [q]

Another analysis with the mixed-effect model was undertaken to discern if Iraqis show a similar tendency to reduce the Iraqi [g] phoneme in favor of /q/, especially since Syrians predominantly use [ʔ] (glottal stop) instead of [q] or [g]. Contrary to the patterns seen with [č] and [k], my findings show a consistent behavior when it comes to [g]. The context did not bring about notable changes. With a p-value of 0.793, it cannot be concluded that the conversational context has an effect on the usage of [g] and [q].[78] This consistency implies that Iraqis maintain their distinctive [g] even when speaking with Syrians, it remains robust in inter-dialectal interactions.

[78] It is also noteworthy that age and gender did not produce a significant impact on this phonemic preference.

6.2.3 Interim Conclusion: Iraqi Arabic

Starting with the prefix *da-*, the results indicate that both age and context play significant roles in the usage among the Iraqi speakers. Older speakers demonstrate a notably higher usage of *da-*, whereas younger speakers tend to reduce its usage. Additionally, interactions with Syrian speakers significantly impact *da-* usage within my dataset, highlighting the contextual dependency of this linguistic feature. Compared to the older Iraqis in this study, the younger speakers – as most of them stated – are not as immersed in environments where Arabic is the dominant language in their daily lives. This lack of a consistently Arabic-speaking context does not reinforce Iraqi Arabic linguistic features, such as *da-*, in general. Their relatively limited exposure strongly contrasts with the older generation, who, having spent more formative years in Iraq, have a strong understanding of the contextual applications of the prefix. Maintaining the use of *da-* demonstrates linguistic maintenance and a deeper pragmatic understanding of the marker, highlighting how well they understand its purpose and how adeptly they apply it in various contexts. Moreover, both older speakers who participated in individual and group conversations tend to reduce their use of this distinct Iraqi feature when interacting with Syrians. This likely reflects an effort to accommodate or level their speech for clarity, as Syrian speakers neither use nor necessarily recognize the *da-* prefix – illustrating classic accommodation through the reduction of a marked regional feature.

It is important to note the diverse linguistic backgrounds of the speakers, which likely influence their use of the *da-* prefix. Sabiha and her daughter Amira spent two years in Syria and five years in Egypt before settling in Germany. This extensive exposure to different Arabic dialects could have shaped their linguistic preferences, particularly in their reduction of *da-*. Munir, on the other hand, has had extensive interaction with Arabic speakers from various regions due to his work in Iraq, and his three-month stay in Syria may have further enhanced his linguistic adaptability. Adam, on the other hand, had limited engagement with other Arabic-speaking communities prior to my data collection, which might have impacted his use of *da-* that he, compared to the other speakers, did not reduce during group conversations.

The second part of the analysis revealed a notable trend among younger Iraqi speakers who display a stronger inclination towards the use of [č] over [k]. This preference for a marked and distinctively Iraqi variant like [č], which is not shared with Syrian Arabic, might indicate a form of stylistic reduction. This reduction, manifesting as a limited use of

[k], could be attributed to younger individuals' lesser exposure to the broad linguistic norms embodied by ESA. This age-based divergence in phonemic preference underscores a shift in linguistic behavior among the Iraqi participants. Unlike older generations, who likely experienced a more diverse linguistic interaction within Arab communities, promoting a convergence towards ESA (see also 2.2.4 and 3.3), younger individuals might not have the same breadth of linguistic experience and awareness that encourages adherence to such leveled forms.

The analysis shows that while age influences the variant choice, [č] is more frequently used in individual interviews with Iraqis. In contrast, in group settings with Syrians, [č] is comparatively underrepresented, and there is greater variability in the usage of [k]. In individual interviews, all participants maintain [č]. This statistically significant difference between the usage of [č] and [k] in interview and group conversation contexts may be explained by classic accommodation. In group conversations, the non-shared and marked variant [č] may be eliminated through accommodation, leading to increased usage of [k]. The sociolinguistic prestige associated with [k] in the context of Syrian Arabic could also influence their usage. If [k] is perceived as more prestigious than [č] or more widely accepted in the broader Arabic-speaking community they interacted with in Syria and Egypt, both Sabiha and Munir might use [k] more frequently in mixed groups to align themselves with what they perceive as a "higher linguistic standard".

However, not all speakers follow this pattern. Adam, for instance, stands out as a case of relative linguistic isolation. Unlike others in the group, he did not reside in any Arabic-speaking country besides Iraq and had minimal contact with Arabic speakers in Germany prior to the interview. His linguistic profile reflects the limited exposure to Arabic in its native cultural setting: he displays a comparatively high use of German borrowings (see Figure 6, Section 6.1.1.3), frequent use of the preverbal marker *da-* (see Figure 22, Section 6.2.1.2), and only a single instance of switching from [č] to [k] (see Figure 24, Section 6.2.2.2). Adam may therefore be considered an "isolated speaker" type, whose linguistic behavior is shaped primarily by early and stable exposure to Iraqi Arabic and significant contact with German, rather than by interdialectal accommodation. His case reinforces the idea that individual trajectories and social environments can strongly mediate the impact of language contact, even within broader group-level trends.

This phenomenon, where elder speakers like Sabiha and Munir increase their usage of [k] in group settings, can be attributed to accommodation. This tendency for individuals to adjust their speech style toward their interlocutors' speech style is often more

pronounced in group settings. The dynamics of social interaction encourage individuals to converge linguistically with their Syrian interlocutors to facilitate smoother communication and social harmony. In the case of Munir and Sabiha, who have both spent significant time in regions where [k] is a common phonetic variant (Syria and Egypt), their increased use of [k] during interactions with Syrians suggests a subconscious or conscious alignment with a more familiar or socially acceptable form in that specific conversational context. Their long-term exposure to these linguistic environments may have made them more linguistically flexible or inclined to use [k] instead of the Iraqi variant.[80]

Additionally, the concept of linguistic security might play a role, especially with older speakers. Older individuals might feel a greater sense of linguistic security and confidence, which can lead them to use forms that might not align strictly with the norms of their native dialects when they believe it aids in communication or gathers positive social feedback. This is evident from Munir's stay in Syria, potentially making him more comfortable and fluid in using [k] in a context where it might facilitate better understanding or acceptance among Syrian speakers.

6.3 Sociolinguistic Variation among Syrian Speakers

Building on the analysis of linguistic variation in Iraqi Arabic, this section turns to features characteristic of Syrian Arabic. I focus on two variables: the presence [h] or absence [Ø] of (h) in the third person object suffixes *-ha* and the third person plural suffix *-hon* as well as the prefix *ʕam-*. Following a brief overview of these variables, I will present illustrative examples and then move to the statistical analysis.

6.3.1 Variable morphemic (h): [h] vs. [Ø]

The variable represented by (h) signifies the presence or absence of (h) in the third person singular feminine suffix /-ha/ and in the third person plural suffix /-hon/ for both genders. Morphologically, the variation between [h] and zero [Ø] is confined to situations where

[80] The fact that ESA consists of a combination of two theoretically distinct varieties suggests that speakers can choose elements from each. Therefore, understanding ESA involves considering multiple intersecting factors: the Iraqi speaker's colloquial background and their proficiency in SA; the context of the conversation, including its level of formality, the topic, and the relationship between the interlocutors, such as their origin, relative status, education level, e

/h/ is present in the 3rd person suffixes *-ha* and *-hon*, while not influencing /h/ in the word stem. To further illustrate this, Table 17 provides examples of pronominal suffixes on nouns, highlighting how these suffixes behave following consonants and vowels. The examples are based on the words "house" and "money", adapted from Aldoukhi et al. (2014, p. 29):

	SINGULAR		**PLURAL**	
	After consonant	After vowel	After consonant	After vowel
1.	*beeti*	*maṣaariyyi*	*beetna*	*maṣaariina*
2.M	*beetak*	*maṣaariik*	*beetkon*	*maṣaariikon*
2.F	*beetek*	*maṣaariiki*		
3.M	*beeto*	*maṣaaríi*	*beeton/ beethon*	*maṣaariihon*
3.F	*beeta/ beetha*	*maṣaariiha*		

Table 17. *Pronominal Suffixes on Nouns with Examples for Suffixes Following Consonants Based on 'house' and Examples for Suffixes Following Vowels Based on 'money' (adapted from Aldoukhi et al., 2014, p. 29).*

Previous studies have acknowledged and provided explanations for this variation, underscoring the irregularity of [h] in these pronominal suffixes. Scholars such as Cowell (2005) and Grotzfeld (1965) have highlighted this aspect of inconsistency. Cowell's work (2005, p. 539) illustrates the 3rd person feminine and plural suffixes containing a *-h-* (*-ha*, *-hon*) and further notes (p. 541) that this *-h-* can be omitted following consonants and, in some instances in Lebanon, following long vowels. Grotzfeld (1965, pp. 42–43) presents both the *-h-* and '*-h*-less' variants after consonants, mentioning that the *-h-* is often removed in the latter case. After vowels, only the *-h-* variant is mentioned.

This distinction hinges on the preceding vowel, specifically requiring /h/ to persist following /aa. Examples include *ixt-**ha*** versus *ix-t**a*** ('her sister'), that show variability, versus *rama*ː*-**ha*** ('he threw it (F)'), where /h/ consistently follows /aː/. This indicates that the dynamics of /h/ in Damascus Arabic tend to stabilize when directly following /aː/, but may vary when connected to suffixes absent of this vowel condition (Al-Wer 2022, p. 25).

Research concerning the presence or omission of *-h-* in Damascus Arabic has been previously undertaken, as exemplified by Ismail (2009) and Lentin (2009). They offer a comprehensive understanding, suggesting that the diminishing use of *-h-* has been

noticeable over recent years. There is a pattern of dropping *-h-* following consonants and vowels, excluding the vowel /a/. Ismail (2007) explores the influence of age and region on language evolution, particularly the use of /h/ in the third-person feminine suffix /-ha/ and the plural suffix /-hon/. Focusing on 56 individuals from Shagoor and Dummar districts in Damascus, the research highlighted minor generational shifts in the use of /h/. However, the study also indicated that these linguistic changes are not solely dependent on age and regional factors, suggesting the interplay of broader social dynamics in dialect evolution. From instances highlighted by Ismail (2007, p. 197), it is evident that [h] is inconsistently found after consonants. After vowels, the [h] variant interchanges with glides [w] and [j]. Specifically, [w] comes after the high back vowel [u], while [j] appears after the high front vowel [i]. Following the long low vowel /a/, the presence of [h] is mandatory (Ismail 2007, p. 197):

(65) *fataḥnaa-**ha***
'we opened it'

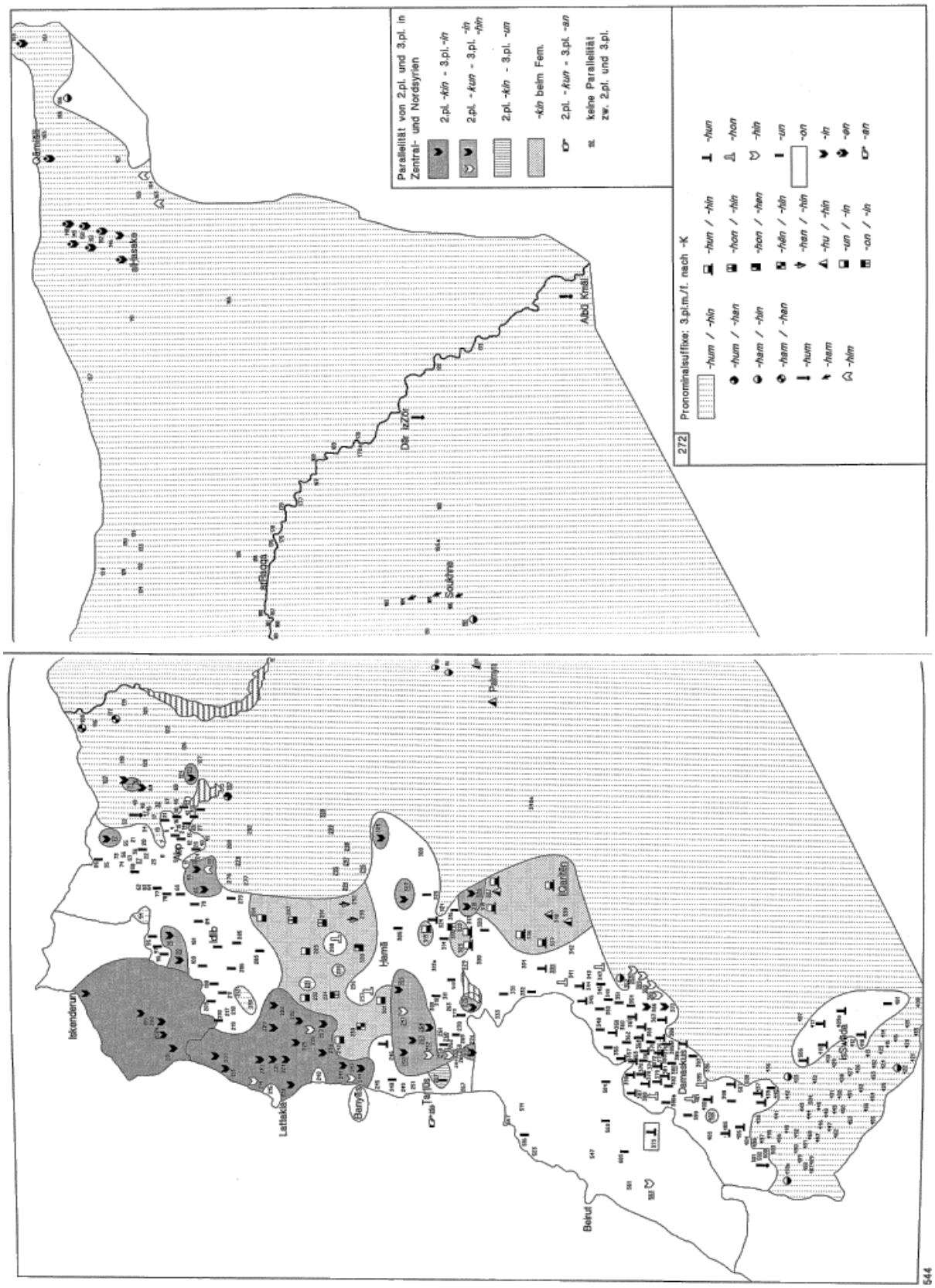
(66) *žawwaznaa-**hon***
'we arranged for them to marry'

Broadly speaking, the presence or lack of [h] in the suffix is often attributed to its disappearance due to weakening or assimilation among certain speakers. Bergsträsser (1924) associates the missing [h] in the suffixes with assimilation or weakening, especially after consonants. In subsequent research by Gralla (2003), there is an observation of the fluctuating presence of [h] in the suffix. Lentin (2009, p. 158) highlights that while the usage of [h] in the suffix has diminished, it can still be found in instances of emphasis. However, this feature is increasingly marginalized, as evidenced by forms such as *kátaba* ('he wrote it'), akin to *kátabo* ('he wrote it'), commonly used by the youth and children, contrasting with the *katáb(h)a* used by other speakers These speakers now predominantly use the form *-a* instead of *-ha* for the third person singular personal pronoun, and *-on* for the third plural. Ismail (2007, p. 199) points out that despite the lack of empirical evidence to support the Damascus dialect as traditionally 'h-full', the observed variability in the use of [h] could indicate a newer adoption, potentially through *h*-insertion. Therefore, she considered the

consistent variation in the [h] sound as an inherent feature of the Damascus dialect, likely introduced by dialect contact.[81]

Map 4 provided by Behnstedt (1997, pp. 545–555) and reproduced below offers a distributional overview of the usage of [h] in different regions. Damascus, the capital city, emerges as a hub of linguistic variation, where the presence and absence of the [h] sound alternate. This variability extends beyond the city limits, with a clear geographical distribution observed across the country. The western strip, including Damascus, predominantly shows an [h]-less pattern, while areas farther from the coast tend towards the [h]-full pattern. This distribution reflects distinct dialect groupings, with Damascus positioned within the Syro-Lebanese continuum. The city's linguistic diversity is further shaped by economic migration and daily commuting from [h]-retaining regions into the capital. Similar patterns are observed in Aleppo, reflecting its position at the border of different dialect zones (Ismail 2007, p. 199). The diffusion of linguistic features, such as the spread of the [h]-less pattern, aligns with the "urban hierarchy model" of linguistic diffusion proposed by Chambers and Trudgill (1980). According to this model, linguistic innovations tend to originate in major urban centers – such as Damascus and Aleppo – before spreading to smaller urban centers and rural areas. This framework offers a useful explanation for regional variation in [h] usage, with larger cities functioning as centers of change that influence surrounding dialects.

[81] Though from a longer historical perspective Owens (2006: 241-245) argues that the variable realization of /h/ in these pronominal forms is already attested in Sibawaih.



***Map 4**. Geographic Distribution of [h] and Ø in Pronominal Suffixes*
(Behnstedt 1997, pp. 544–545)

In the descriptive analysis that follows, we examine the occurrence of [h] or its absence [Ø] following a consonant or vowel. This analysis includes the phonological variable, distinguishing between VV-h/Ø and VC-h/Ø, with consideration given to age, gender, and conversational context to provide a comprehensive overview of its usage patterns. Subsequently, a statistical analysis will be conducted to investigate the effects of age and conversational context on the general usage of [h] and [Ø].

6.3.1.1 Examples from the Data

Building on the theoretical introduction of the variability of (h), the following examples from my data illustrate the usage of this feature:

(67) **Consonant + [h]**

kaan *fii-**ha*** *nizaam* *daaxli* *bi-l-madrase*
was in-3F system inner in-the-school
'there was an internal system in the school'

bidd-hon *y-aaxd-oo* *maʕ-**hon***
want-PL 3-take-him with-them
'they want to take him with them'

(68) **Vowel + [h]**

bḥaawəl *rakkəz* *ʕali-**hon*** *bi* *məwḍuuʕ* *ir-riyaaḍiyaat*
try-I focus on-them in topic mathematics
,I try to focus on them in mathematics'

ana *mudiirat munaaṣara* *fii-**ha***
I director advocacy in-F
'I am the advocacy director there.'

(69) **Consonant + Ø**

d-diraase *kill-**a***
the studies all-F
'all the studies'

*bidd-**a*** *t-rooḥ* *ʕa-l-koors*
want-F 3F-go to-the-course
'she wants to go to the course'

(70) **Vowel + Ø**

bidd-un *yi-ktb-oo-**a***
want-PL 3-write-PL-3F
'they want to write it'

ma *fii-**on*** *banaat* *kill-on* *ṣubyaan*
not in-PL girls all-PL boys
'There are no girls among them, all are boys.'

In the following descriptive analysis, the occurrence of [h] or [Ø] after a consonant or vowel will be investigated.

6.3.1.2 Variation in the Usage of (h)

Younger and older speakers show similar behaviors, with [Ø] used in 77.93% of cases among younger speakers (286 tokens) and 79.72% among older speakers (456 tokens). Focusing on suffixes with [h], a slightly higher proportion of [h] tokens among younger speakers occurs after consonant-final stems: 69.89% (130 tokens), compared to 58.17% (178 tokens) among older speakers.

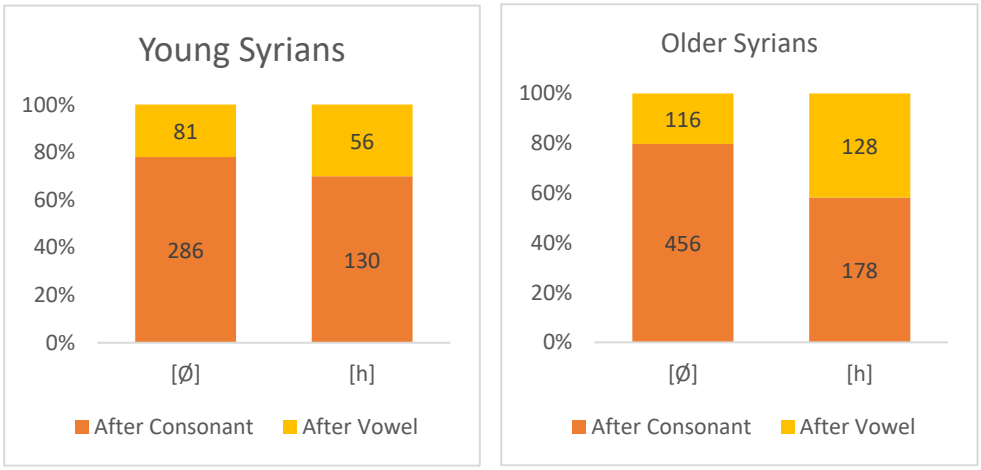


Figure 25. *Usage of [Ø] and [h] among Young and Old Syrians*

When examining differences between male and female speakers, a notable contrast emerges, particularly in the distribution of [h] after consonants. Female speakers use [h] after consonants in 73.39% of relevant cases (273 tokens), while male speakers show a

much lower rate of 29.17% (35 tokens). In contrast, male speakers use [h] after vowels far more frequently (70.83%) than female speakers. Regarding [Ø], a minor difference is observed: male speakers use [Ø] after vowels in 23.89% of cases, compared to 16.67% among female speakers.

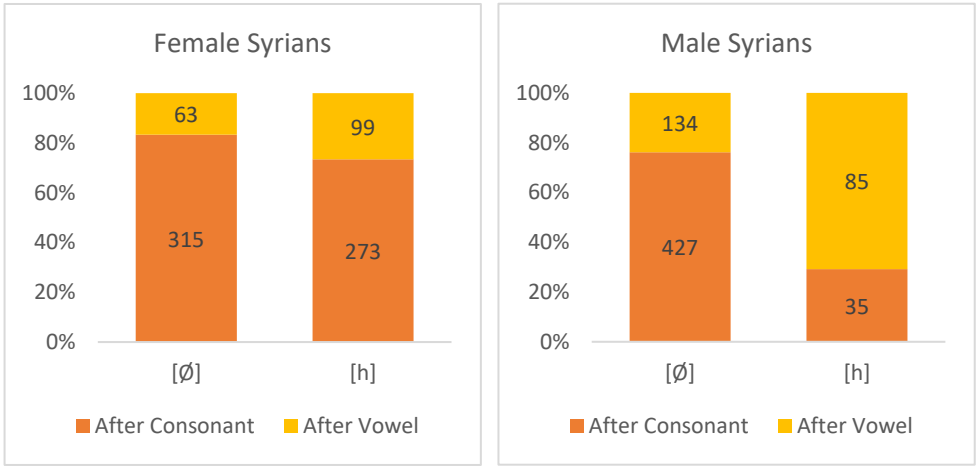


Figure 26. *Usage of [Ø] and [h] among Female and Male Syrian Speakers*

Turning to the conversational context, [Ø] is used similarly after consonants and vowels in both individual and group interviews, showing only minor variation. However, [h] shows more noticeable differences. In individual interviews, [h] appears slightly more frequently after consonants, while its use after vowels is somewhat lower – 37.09% (171 tokens) – compared to group interviews, where it occurs in 41.94% of vowel-final cases (13 tokens).

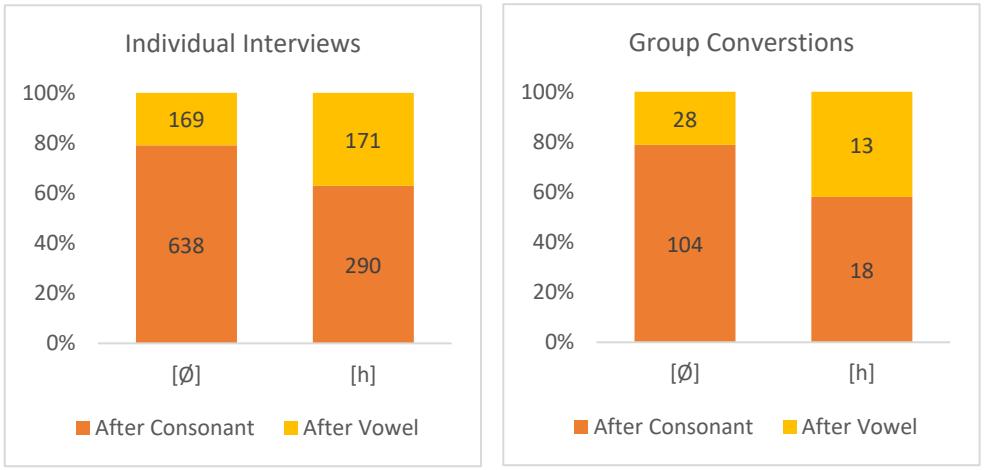


Figure 27. *Usage of [Ø] and [h] among Syrians in Individual Interviews and Group Conversations*

The analysis shows that both younger and older Syrian speakers predominantly use the [Ø] suffix after consonants. In contrast, gender-based differences are more pronounced: female speakers tend to use [h] more often after consonants, while male speakers favor [h] after vowels. Conversational context has a minor effect, with [h] appearing more frequently after consonants in individual interviews than in group settings.

6.3.1.3 Variationist Results

In analysing the usage of third-person suffix pronouns – specifically the presence or absence of (h) – across 1,431 tokens, older speakers are found to omit [h] in 64.00% of cases, while younger speakers do so slightly more often, at 65.05%[82]. Conversely, older speakers use [h] in 36.00% of cases, compared to 34.95% among younger speakers. However, mixed-effects model analysis indicates that age does not significantly influence this variation ($p > 0.05$).

Gender differences are more pronounced. Female speakers display an almost even split between using [h] (111 instances) and omitting it (112 instances). Male speakers, by contrast, show a clear preference for omitting [h], doing so in 81.11% of cases (146 [Ø] vs. 34 [h]). Despite these differences, the mixed model shows that gender does not have a statistically significant effect on the use of this phonetic feature.

[82] It is important to note that the analysis does not distinguish between VV-h/Ø and VC-h/Ø and only considered the presence or absence of [h].

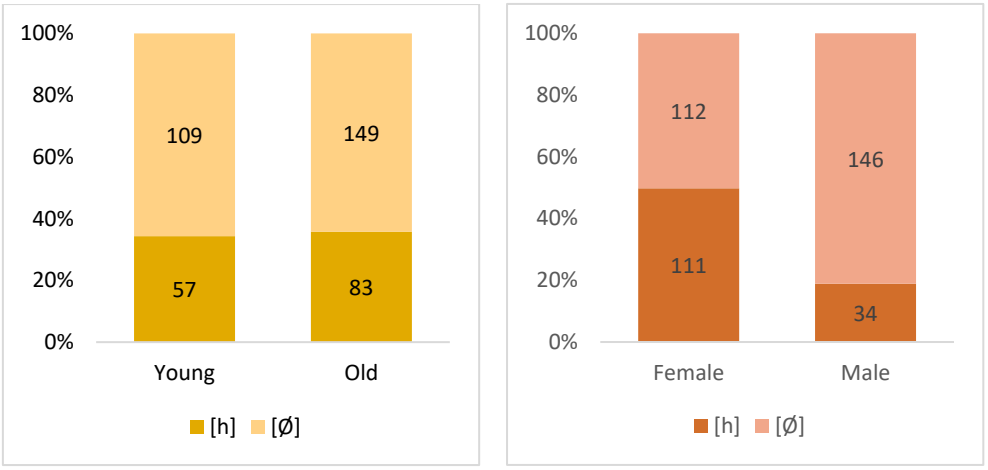


Figure 28. *Normalized frequencies of [h] and [Ø] among Syrian speakers (Age and Gender)*

In examining the influence of conversational context, [h] appears significantly more frequently in group conversations, with a normalized frequency of 129 tokens per 10,000 words (78.66%), compared to 35 tokens per 10,000 words (21.34%) for [Ø]. The mixed-effects model estimates that [h] is approximately 1.86 times more likely to occur than [Ø] in group settings, underscoring the impact of context on phoneme choice. As illustrated in Figure 29, [h] is consistently more prominent in group interviews, while [Ø] tends to dominate in individual interviews.

Individual patterns also emerge distinctly, as can be seen in Figure 29: Ashraf (young male speaker) predominantly uses [Ø] in individual interviews (89.8% of cases), but his use of [h] increases to 25.7% in group discussions. A similar pattern is observed with the young female, Yara, who uses [Ø] in 98.1% of her individual interactions but increases her use of [h] to 19.6% in group interactions. In contrast, Jalal (old male speaker) shows relatively consistent usage between contexts, using [h] 19.8% in individual settings and 22.5% in groups. Huda, the older female also shows an increase in [h] usage from individual (12.1%) to group interactions (18.1%).

These patterns suggest speaker-specific variation, yet a broader trend emerges: [Ø] remains the dominant form across speakers, regardless of age or gender. However, group contexts consistently show a notable rise in [h] usage, particularly among younger speakers.

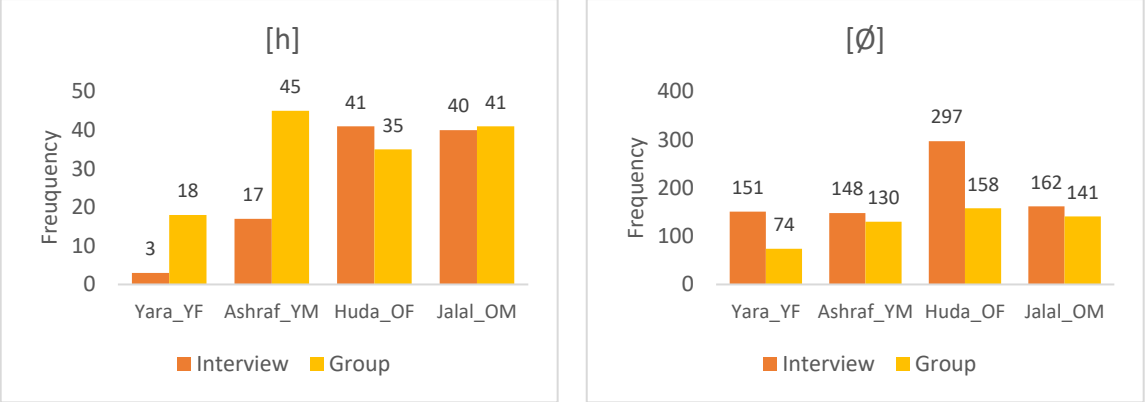


Figure 29. *Comparison of [h] and [Ø] in Individual vs. Group Conversations among Syrian Speakers (Normalized Frequencies for Each Speaker)*

6.3.2 Prefix *ʕam-*

The second variety-specific feature under analysis is the prefix *ʕam-*, examined in terms of its occurrence before verbs, both with and without the prefixed *b-*, followed by a statistical analysis. Syrian Arabic *ʕam-* functions as a continuous or habitual marker. Grotzfeld (1965, p. 87) defines its value as "in der Gegenwart des Sprechenden andauerndes Geschehen" (an ongoing event in the presence of the speaker) and adds that it is used "zum Ausdruck besonderer Eindringlichkeit" (to express special urgency). This marker occurs with all person and number combinations. Cowell (1964, p. 320) refers to *ʕam-* as "the particle of actuality", noting that it conveys a progressive reading. *ʕam-* is derived from the agentive noun *ʕammāl* 'doer' (Bubeník 2017, p. 26). Cowell (1964, p. 320) explains that the actuality particle *ʕam-* is directly prefixed to the imperfect verb form. However, it differs from conventional prefixes in its ability to apply to multiple verbs simultaneously in coordination, as shown in the following example:

(71) *ma* ***ʕam****-yaakol ulaa yašrab*

'He is neither eating nor drinking.'

This is in contrast to the simple imperfect prefix *b-*, which typically repeats with each verb in constructions like:

(72) *ma byaakol ulaa* ***b****yašrab*
'He neither eats nor drinks.'

ʕam- shows an ambiguous interpretation where the action could denote either habitual or continuous aspects, implying interior aspect reading but not necessarily indicative. For instance, in example (73), the prefix *b-* is employed to denote the indicative mood, while in example (74), it signifies an action occurring at the present moment:

(73) *ana mā* ***ʕam*** *bəštəġel* *ha-l-ʔiyyām*
1SG NEG PROG work. IMPF.1SG DEM-DEF-day.PL
'I'm not working these days.' (Cowell 2005, p. 384)

(74) *mū* ***ʕam*** *yəštəġel* *hallaʔ*
NEG PROG-work.IMPF.3SG.M now
'He's not working now.' (Cowell 2005, p. 387)

ʕam is typically translated into English using the "progressive" *-ing* forms. For instance, a verb prefixed with *ʕam-* may suggest interrupted or sporadic activities, viewed as time-limited states rather than mere dispositions or generalities, according to Cowell (2005, p. 321). Consider the example:

(75) ***ʕam*** *iṣammed* *maṣaari* *mənšaan* *taqaaʕdo*
PROG save.IMP.3SG.M money for retirement-his
'he's saving money for his retirement!'

However, not all types of English verbs commonly appear in the *-ing* form to express actual ongoing actions. In contrast, Arabic uses *ʕam-* with a broader range of verbs to indicate ongoing activity, as Cowell (2005, p. 321):

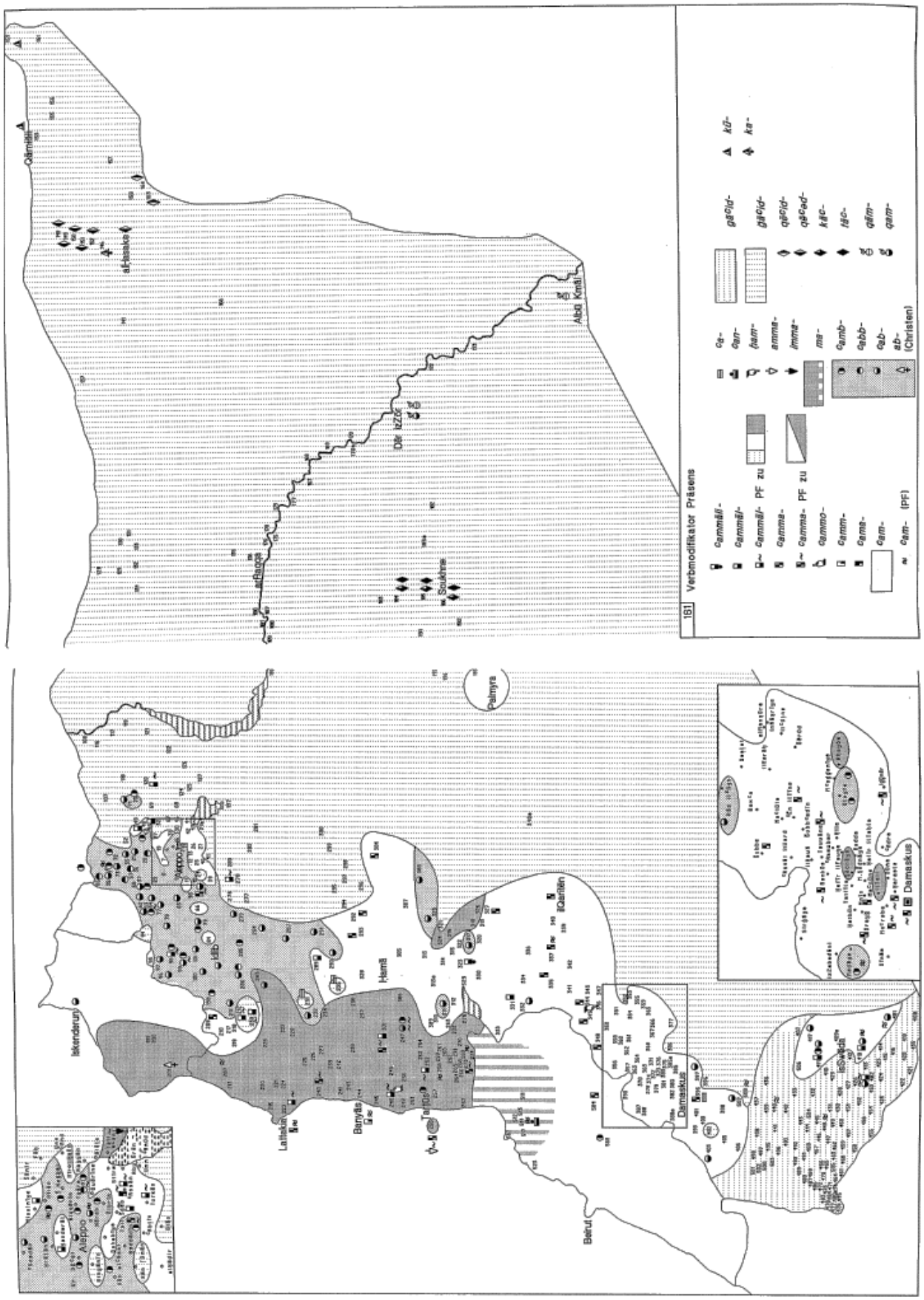
(76) *šu* ***ʕam*** *təʕni?*
what PROG mean.IMP.2SG
'What do you mean?' (or 'what are you getting at?')

To denote future tense on such a stem, one can either use the *raḥa-* family of proclitics or uniquely apply the *b-* proclitic, which Cowell identifies as signaling the 'indicative mode'

and associates with a variety of uses, such as future, 'annunciatory', 'generalizing', and 'dispositional' functions' (Cowell 2005, pp. 324–329). Despite *ʕam-* being traditionally considered the primary modifier for the progressive aspect, the literature records several variants including *ʕamma* and others. Cowell (2005, p.320) notes that while there are multiple variants of the particle, *ʕam-* is the most commonly used. A review of different grammars shows the following variants:

- *ʕam* and *ʕamma* (Grotzfeld 1965, p. 87)
- *ʕam* and (variant) *ʕamma* (Ambros 1977, p. 75)
- *ʕamm*, *ʔam*, and ʕammāl (Cowell 2005, p. 320)

However, in Damascus, variants like *ʕamma-*, and occasionally *ʕamm-*, *ʔam-*, and the complete word *ʕammāl* are also observed. The following map gives an overview of the distribution of the different variants within Syria:



Map 5. *Geographic Distribution of the prefix ʕam- and its variants (Behnstedt 1997, pp. 322–323)*

In a sociolinguistic study, Berlinches Ramos's (2020, pp. 94–95) highlights linguistic shifts observed in Damascus, indicating a tendency towards the variant *ʕam*, primarily among younger speakers. The study predominantly features data from young informants, showing a notable usage of two variants: *ʕam* (286 instances) and *ʕamma* (7 instances). Interestingly, the two informants who used *ʕamma* also used *ʕam*, with the latter being far more frequent. This suggests a decline in the use of *ʕamma*. Additionally, variants such as *ʕamm* and *ʕammāl*, documented in older sources, were not used by any informant, indicating their absence in the speech of younger generations. Overall, *ʕam* emerges as the dominant particle used by contemporary speakers, especially for expressing the progressive aspect.

6.3.2.1 Examples from the Data

Before providing a statistical anlysis, examples on how the prefix is used, will be presented. As mentioned above, this prefix exhibits variation, often appearing without the *b*-prefix on the verb, as illustrated in Figure 30. Young and older Syrians show a similar frequency in the use of *ʕam-* + *b*-verbs, accounting for approximately one-fifth of all occurrences, with no significant generational difference noted.

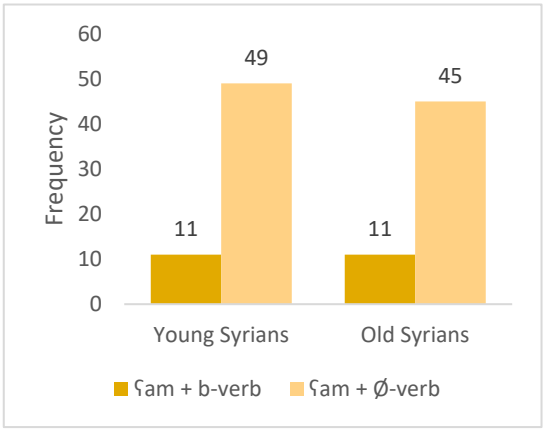


Figure 30. *Normalized Frequency of ʕam + b-verbs and ʕam + [Ø]-verbs among Young and Old Syrians*

While multiple variants exist (such as *ʕamma*) in Damascus Arabic, only *ʕam-* was observed in my data. The following examples show the usage with and without *b-*:

(77) ***ʕam*** *yi-ʔuul-u*
PROG 3SG.M-say-PL
'they say'

(78) ***ʕam*** *b-y-iʕməl* Ausbildung
PROG *b*-3SG.M-do vocational training
'He is doing a vocational training'

6.3.2.2 Variationist Results

The analysis of the prefix *ʕam-* is based on 414 occurrences in the raw data, with frequencies normalized per 10,000 words to assess distribution across age and gender groups. The younger generation uses *ʕam-* 59 times, slightly more than the older generation, who use it 55 times. With respect to gender, male speakers account for 65 instances, while female speakers produce 48. These differences are not statistically significant. The model's random effects reveal some variation across individual speakers, indicating minor individual differences in usage, though none are pronounced.

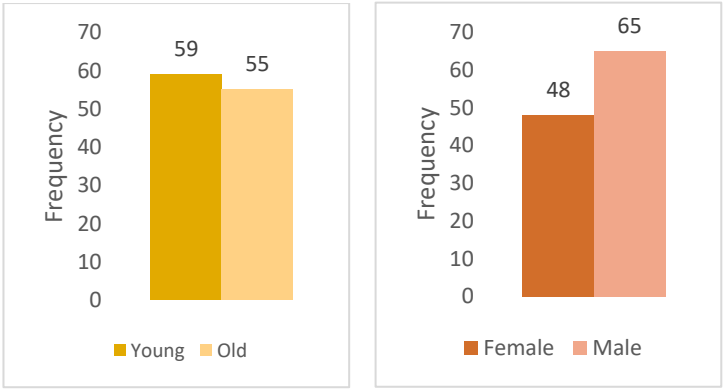


Figure 31. *Normalized Frequencies of ʕam- among Syrian Speakers (Age and Gender)*

The conversational context plays a significant role in the use of *ʕam-*. Results from the mixed-effects model show that the likelihood of using *ʕam-* increases by approximately 1.72 times in group settings, a difference supported by a highly significant p-value ($p < 0.0001$). As illustrated in Figure 32, all four Syrian speakers increase their use of *ʕam-* during group conversations with Iraqi speakers. Notably, the young female speaker, Yara, nearly doubles her usage in group settings compared to individual interactions.

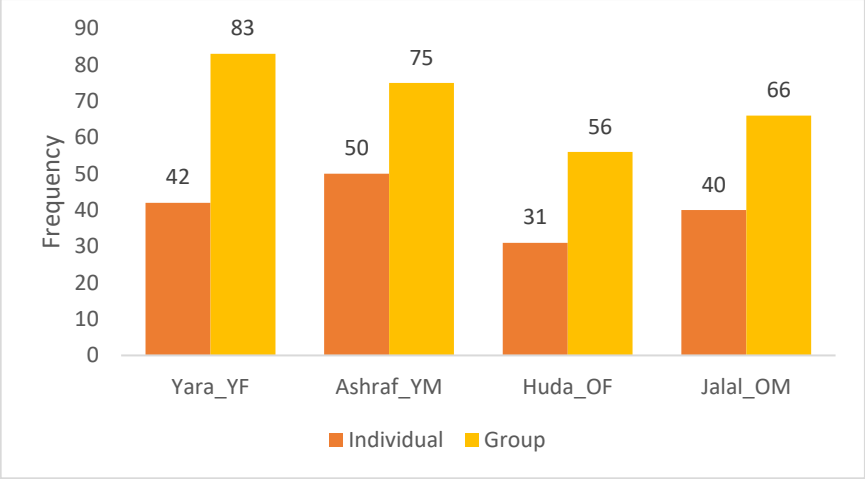


Figure 32. *Comparison of ʕam- in Individual vs. Group Conversations among Syrian Speakers (Normalized Frequencies for Each Speaker)*

6.3.3 Interim Conclusion: Syrian Arabic

In the beginning of the subsection, a descriptive analysis was given on variable morphemic (-*h*-) where the occurrence of [h] or its absence [Ø] following a consonant or vowel was examined. The analysis investigates the prevalence of [h] or its absence [Ø] after consonants or vowels among younger and older speakers. Both age groups predominantly use [Ø], but among younger speakers, a slightly higher proportion of words ending in consonants use the [h] suffix compared to those ending in vowels.[83]

Moreover, when comparing female and male speakers, a contrast is observed in their usage of [h]. Females tend to use [h] after consonants more frequently, while males use it more after vowels. Conversely, males use [Ø] after vowels slightly more often than females. In the context of conversational settings, the usage of [Ø] after consonants or vowels remains similar in both individual and group interviews. However, the occurrence of the [h] form is slightly higher after consonants in individual interviews compared to group interviews, and slightly lower after vowels in individual interviews compared to group interviews.

Statistical analysis with the mixed-effect model shows that both older and younger speakers tend to favor [Ø] over [h], with age showing no significant influence. While females show a balanced usage between [h] and [Ø], males overwhelmingly prefer [Ø]. However, gender does not significantly impact the [h] suffix usage. In group discussions,

[83] Like in Gralla (2003), I observe the diminishing presence of [h] in the suffix within the Syrian speakers.

[h] is notably favored over [Ø], indicating a preference for [h] in group conversations with Iraqi speakers.[84]

The usage of [h] among Syrian speakers, particularly in interactions with Iraqi counterparts, presents a notable case of linguistic adaptation in response to sociolinguistic environments. The Syrian participants likely increase their usage of [h] to align more closely with the speech patterns of Iraqi Arabic, where [h] is usually used. This convergence is a typical example of accommodation. In this context, [Ø] is potentially perceived as a distinctly Syrian feature. If [Ø] is considered less prestigious or is stigmatized, its replacement with [h] in mixed dialect conversations can be seen as an effort to elevate the speaker's linguistic status or align more closely with the group's perceived linguistic norms. Moreover, it reflects a conscious or subconscious effort by Syrians to use a phoneme that is likely more intelligible across different Arabic dialects, thus enhancing overall communication effectiveness. Aligning with higher-prestige norms by using [h] instead of [Ø] may also play a role in how Syrian speakers interact in mixed settings.

In examining the variable *ʕam-* in the second part of the dialect-specific features, it is notable that both young and older Syrians use *ʕam* + *b*-verbs with similar frequency, indicating a lack of significant intergenerational difference. While initial observations from descriptive statistics might hint at age and gender differences in usage, these differences do not significantly impact the actual use of *ʕam-* in Syrian Arabic. Notably, conversational context plays a critical role; in group discussions, all speakers significantly increase their usage of *ʕam-*, potentially as part of a divergence strategy where they emphasize or establish differences from others.

The maintenance of *ʕam-* among Syrian speakers, despite interactions with Iraqi speakers, can be explained by several factors. Firstly, *ʕam-* in Syrian Arabic is likely not a stigmatized feature, meaning it does not carry negative connotations or associations that might otherwise prompt speakers to avoid its usage. Instead, it remains a neutral or positively perceived element within the Syrian dialect.

Secondly, the continued use of *ʕam-* among Syrians, even in a context of potential accommodation, suggests that this feature serves important linguistic or communicative functions that are valued within the Syrian Arabic participants. Its usage might facilitate clarity and understanding in verbal interactions, providing a grammatical or semantic role

[84] Nevertheless, it is necessary to include the occurrence after vowels or consonants in the analysis for further research, as it plays a crucial role in the realization of [h].

that enhances the precision or intent of communication. For example, *ʕam-* is typically used to indicate the progressive aspect in verbs, which is crucial for expressing ongoing actions or states.

Furthermore, the consistent use of *ʕam-* across generations, as indicated by the similar frequencies among young and older speakers, implies that this feature is deeply embedded in the spoken varieties of Syrians. This could reflect a maintenance strategy, where speakers consciously or subconsciously maintain certain linguistic features to preserve a sense of identity and continuity within their community, especially when in diaspora or interacting with other Arabic dialects. Moreover, the increase in *ʕam-* usage in group discussions could be viewed as a divergence strategy. By enhancing their use of a distinctly Syrian feature, speakers may be aiming to assert their cultural and linguistic identity, distinguishing themselves from other groups, particularly in mixed dialect settings. This could be especially relevant in interactions where establishing a clear group identity is desired, helping to reinforce social bonds within the group while simultaneously marking cultural distinctiveness.

In summary, the sustained use of *ʕam-* among Syrian speakers, despite the potential for levelling in the mixed dialect context, underscores its significance as a non-stigmatized linguistic feature that serves both communicative and social functions within the Syrian Arabic community.

Chapter 7: Conclusion and Discussion of the Findings

In this thesis, I have presented a study of Arabic language variation and contact among Iraqi and Syrian speakers living in Germany since 2014/2015. This study addresses a linguistic situation that has previously received little attention in sociolinguistics and focuses on Arabic as a minority language within Germany. This work aims to deepen our understanding of the factors that influence the dynamics of spoken Arabic in the contemporary world. The insights derived from this study are intended to enrich our comprehension of language maintenance, shift, and variation within the context of migration.

The main empirical findings were described in Chapter 6. This chapter examined the Arabic of two ethnic/national groups, Iraqi and Syrian refugees in Germany, from two perspectives. On the one hand, individual interviews were conducted, recording participants in one-on-one conversations to investigate age-related differences. On the other hand, mixed Iraqi-Syrian group encounters were studied to explore the interactional dynamics of diasporic Arabs living in a minority context. In total, eight key variables were identified. Four of these variables were shared between the two groups, while the remaining four were unique to either the Iraqi or Syrian groups, as listed in the following:

Shared features:

- German borrowings
- Religious expressions
- *wiyya* vs. *maʕa*
- Analytic Genitive: *maal* and *tabaʕ*

Iraqi-specific features:

- [k] / [č]
- Imperfect verbal pragmatic prefix *da-*

Syrian-specific features:

- Actuality prefix *ʕam-*
- Suffix [h] / [Ø]

To enable this analysis, I created two corpora in Iraqi and Syrian Arabic, a necessary step as there was no existing linguistic data on these communities in Germany. By focusing on the sociolinguistic impacts of migration, this thesis aimed to fill a crucial gap in current

research and establishes a foundation for future sociolinguistic studies. The study underscores the necessity of closely examining variation to assess how both contact-induced and internally-motivated changes affect spoken Arabic.

Having conducted a quantitative analysis, it is important to note that only the findings pertinent to the research questions will be discussed, particularly those related to intra-group and inter-group interactions. While numerous relevant aspects emerged from the investigation of various linguistic features, the scope of this work necessitates focusing solely on the most significant findings. In addition to this quantitative focus, some qualitative insights from the participants will be provided to enable a deeper understanding of certain interpretation points. This ensures that the analysis not only captures general patterns but also reflects the lived realities of the participants. The following table presents an overview of the key findings derived from the quantitative analyses[85]:

[85] Detailed outcomes of the mixed-effects model analyses are available in Appendix E.

	Dependent Variable	*Group (I: Iraqis/ S: Syrians)*	*Age (Y: young/ O: old)*		*Gender (F:* **females/** *M:* **males)**		*Context (I: interview/ G: group)*		*Accommodation Direction (C: Convergence/ D: Divergence/ M : Maintenance)*
Shared features (both Iraqi and Syrian groups)	German	I	✓	Used more by Y		No difference	✓	Used more in G	C
	Borrowings	S	✓	Used more by Y		No difference	✓	Used more in G	C
	Religious	I		No difference		No difference	✓	Used more in G	C
	Expressions	S	✓	Used more by O	✓	Used more by M	✓	Used less in G	D
	wiyya	I		No difference		No difference	✓	Used less in G	C
	maʕa	S		No difference		No difference	✓	Maintained in G	M
	maal	I	✓	Used more by Y		No difference		Maintained in G	M
	tabaʕ	S	✓	Used more by Y	✓	Used more by M		Maintained in G	M
Variety-specific features	Prefix *da-*	I	✓	Used more by O		No difference	✓	Used less in G	C
	[č]	I	✓	Used more by Y		No difference	✓	Used less in G	C
	[Ø] in Suffix	S		No difference		No difference	✓	Used less in G	C
	Prefix *ʕam-*	S		No difference		No difference	✓	Used more in G	D

Table 19. *Significant Effects (✓) of Age, Gender, and Context on the Dependent Variables and Direction of Linguistic Accommodation*

7.1 Generational Language Shift

The influence of the German language, which is substantial and expected given its dominance, is clearly reflected in my findings. This influence has notably enriched the vocabulary of younger speakers, who are more inclined to incorporate German borrowings into their daily language use. This trend aligns with the expected linguistic adaptations in a predominantly German-speaking environment. While older participants tend to use fewer German borrowings than young speakers, they show a higher frequency of religious expressions in their speech. This generational difference in the use of German borrowings, but also religious expressions, which are identified by some younger participants as characteristic of older generations, suggests, unsurprisingly, that German cultural influences might be stronger among the youth. As families navigate the challenges of maintaining their heritage language (see also 7.1.2), they must also adapt to the dominant language of their new environment. The adoption of German borrowings by younger Iraqis and Syrians not only enriches their vocabulary but also facilitates communication between them and speakers of different Arabic varieties.

Further examining age-related differences within the groups, the "apparent-time" approach (see 5.2.4) has been instrumental. This study reveals that among Iraqi participants, younger speakers are less likely to use the traditional Iraqi feature *da-* (see Section 6.2.1.2), whereas older speakers consistently maintain its usage. Additionally, there is a notable difference in the use of [k] where Iraqi [č] was expected, with younger Iraqi speakers showing a preference for [č] over [k] (see 6.2.2.2) in one-on-one interviews.

In mixed group conversations, the data from the older generation demonstrates a levelling of the stigmatized Iraqi features [č] and *da-*. This pattern of adjustment highlights classic accommodation processes; for example, older Iraqi speakers such as Sabiha and Munir significantly increase their use of [k] when interacting with Syrians. This accommodation might be influenced by their long-term exposure to regions where [k] is prevalent, aligning their speech more closely with what is socially acceptable or familiar in those conversational contexts. Young speakers' struggles with using ESA (see 2.2.4 and 3.3.) in situations involving Arabs from other countries, along with their unfamiliarity with stigmatized forms, can be attributed to a variety of sociolinguistic factors. Limited exposure to ESA in educational settings, or through media can hinder proficiency and weaken the ability for recognizing stigmatized forms. Additionally, young Arabs

growing up in non-Arab countries might experience an overshadowing of Iraqi Arabic by the German, reducing the emphasis on and use of ESA. The young Iraqis in my study noted that they often adapt their linguistic practices to fit in with their peers and often prioritize German over Arabic. These are potential factors that create a scenario where young speakers are well-equipped for immediate community interactions but underprepared for broader contexts where ESA and an understanding of stigmatized and typical Iraqi forms such as [č] and *da-* are crucial.

Among Syrian participants, however, age does not significantly influence the variability in the use of specific linguistic features such as *ʕam-* and (h). Among Syrian participants, the uniform usage of the feature *ʕam-* across age groups might suggest that it is not stigmatized within the community. Mitchell (1986, p. 14-15) highlights that unstigmatized forms in ESA are those that do not draw ridicule or amusement from other speakers and are generally acceptable across various regions and contexts. Unlike other linguistic elements that may be shed in favor of a more neutral or prestigious form (which would be the features reduction/avoidance), *ʕam-* likely seems to retain its value as a deeply embedded feature of Syrian Arabic, free from negative connotations and thus, consistently used by all generations. Its stable presence across different age groups indicates that it serves essential communicative and identity functions within Syrian Arabic.[86]

This observation contrasts with broader findings where age plays a notable role in linguistic preferences, as seen with the analytic genitive among both Syrian and Iraqi groups (see 6.1.4). In the case of Syrian speakers, the mixed-effects model analysis reveals that younger Syrians, particularly men, tend to overproportionally use the analytic genitive forms *maal* and *tabaʕ* over *Iḍaafa*. Also, among the Iraqi group, the usage of the analytic genitive decreases with age, showing a generational preference that is similar to the findings among Syrian speakers. The prevalence of analytic genitive constructions with German borrowings for both groups further significantly underscores a broader trend towards favoring analytic structures, particularly when incorporating lexical items from other languages, which is consistent with previous studies like those by Owens (2005a), Boumans (2006) or Sayahi (2015), as discussed in Section 6.1.4.

[86] This aligns with Abdel-Jawad's (1987) findings, which highlight the importance of attitudinal factors in understanding language variation and change. While certain linguistic forms may be replaced by more prestigious urban variants, others, like the variant /g/ in Jordanian dialects, are maintained as symbols of local identity, solidarity, and pride in origin. Similarly, *ʕam-* in Syrian Arabic appears to be a stable feature, reflecting its integral role in the community's linguistic identity.

7.1.1 Between Tradition and Integration

While this section touches on broader social dynamics such as family structure, religious practices, and intergenerational value transmission, it is important to note that these themes were not treated empirically in the present study. Nevertheless, the recurring references to family celebrations such as Ramadan, the role of parents in language socialization, and expressions of identity across generations suggest that family structures and internal dynamics remain relevant for understanding patterns of language maintenance and shift. This section seeks to cautiously contextualize the observed linguistic behaviors within a broader sociocultural framework which picks out events, rituals, institutions, social structures and cultural practices which deserve closer scrutiny. While they are either touched on only tangentially, or not at all in the current study, their central role in Arabic society justifies their brief consideration here.

The Iraqi and Syrian diaspora, characterized by shared national, ethnic, and religious backgrounds, have migrated due the political turmoil in their home countries. This traumatic dispersal plays an important role in the diaspora to maintain a strong group identity across generations which is reinforced by collective memory and distinct cultural practices (Cohen 2008, p. 180) such as Ramadan and other large family celebrations that the participants mentioned. In understanding the dynamics of language maintenance among Arabic speakers in Germany, the role of the family is crucial (e.g. Owens 1998). Families, as socially constructed units, encounter a variety of challenges that influence their language choices, rooted both in the immediate family environment and the broader societal context shaped by their status as a diaspora.

The pressure for migrants to assimilate into the German mainstream often leads families to prioritize integration over maintaining their heritage language. These challenges vary significantly based on specific circumstances within the German context, such as psychological realities and coping strategies that families use to navigate conflicting priorities and values. Considering that Arabic in Germany is often marginalized, and that teachers as well as peer groups play a critical role in the development of individual attitudes, the challenges become even more pronounced. According to Garrett (2010, pp. 22–23), attitudes are learned through socialization by observing people's behavior and its consequences. In everyday life, these attitudes fill our social and personal spheres, either remaining latent or becoming expressed overtly.

Building on this, it becomes evident that family language policies and parental attitudes might play critical roles in the maintenance and shift of heritage languages within these communities. The influence of parental attitudes towards language preservation is particularly significant in the context of home language policies, which often set the trajectory for whether a minority language is maintained or erodes over time (Spolsky 2012). The dedictation of the home as a support for the minority language is frequently seen as a crucial stage in language shift (Fishman 1991). Positive parental attitudes towards the heritage language – shown by all of the older participants to this study – can substantially impact their children's ability to acquire and retain the language. Conversely, negative attitudes or neglect can lead to reduced fluency and eventual language shift towards German, the dominant societal language. For example, the more actively parents engage with and value the heritage language at home, the greater the likelihood that their children will continue to use and develop proficiency in Arabic. This pattern mirrors findings from other immigrant communities, such as Iranians in New Zealand, where parental valuation of the heritage language positively correlates with its maintenance among children (Gharibi and Boers 2019).

Moreover, there is a consistent thread in the literature that links positive attitudes towards personal identity with the maintenance of heritage languages. Studies involving Turkish and Moroccan youth in the Netherlands have shown that strong identity is often associated with sustained heritage language use (Extra and Yagmur 2010). Such findings underline the importance of parental attitudes in shaping younger learners' linguistic outcomes.

Parents who are not fluent in German often depend on their children for social and institutional interactions, which leads to a role reversal within the family. This reliance on younger family members for mediation in external social transactions, especially prevalent among elder Iraqis and Syrians who primarily speak Arabic, underscores the significance of German proficiency. Furthermore, migration policies in Germany can shape language attitudes variably, potentially fostering a disconnect from the homeland and diminishing the motivation to maintain Arabic. The importance of German proficiency is emphasized among the younger generation of the participants, who view it as crucial for integration and success. However, the older participants also recognize the significance of learning German, while concurrently emphasizing the importance of preserving their Arabic heritage language. Nevertheless, economic stability and integration

into German society are significant motivators for parents to encourage their children to integrate into the German society.

7.1.2 Maintaining Arabic in a German Context

A point that was mentioned by the participants and that significantly contributes to language maintenance among elder Arabic-speaking migrants is the Quran. Regarded as the religious book of Islam, the Quran is not just a spiritual cornerstone but also a vital instrument for preserving the Arabic language and culture. However, participants expressed concern about the younger generations, who are increasingly at risk of losing not only the language but also the cultural connections that come with it. For instance, an older Iraqi, Munir, explained the strict language policy implemented at home to counter this risk:

> *hamdi laah w iš-šukur, iḥna nigdar inguul da-nkaafiḥ wiyya aṭfaalna liʔann, aa, bi-l-beet mamnuuʕ yiḥjuun ayy luġa θaaniya la b-il-aḷmaani la ingiliizi bass ʕarabi, leen haaya luġat, il-luġat l-uṃm ḥaraam waaḥid yinsaaha, yaʕni hiyya iða ma ṭfiid fa ma raaḥ itḍirr laakin hiyya raṣiid ilha il yaʕni raṣiid il šaxṣiita fa haaða qaanuun ʕidna bi-l-beet mamnuuʕ b-ayy luġa θaaniya mumkin bass yoom waaḥid nitsaahal bii-beenaatna iḥna ka afraad il-ʕaaʔila*
>
> Praise be to God and thanks, we can say that we fight with our children about this, at home it's forbidden for them to speak any second language, neither German nor English, only Arabic, because this is the mother tongue and it's a sin for anyone to forget it. It is the essence of a person's identity, so this is a rule we have at home: forbidden to speak any second language, maybe just one day we agree on, between us as members of the family.

Further emphasizing the efforts to support language learning among younger children, the same speaker also highlighted the role of Islamic schools:

> *ḥatta aḥyaanan inšuuf il-awlaad beenaathum min yiliʕbuun bi-l-ġurfa asmaʕhum, baʕḍ il-kalimaat aani aṣiiḥ ʕaleehum min baʕiid ibni ʕarabi hiiči, ey fa iḍaafa annu iḥna msajjiliihum madrasa ʕarabiyya islaamiyya tinṭi duruus bi-l-ʕarabi wa tidarris il-manhaj il-islaami yaʕni id-diin il-islaami (…) iḥna leeš inguul ḥaraam yaʕni bi-n-nisba iliyya aani*

ašuufha kaariθa leeš li-ʔannu iḥna ʕidna jiðuurna ʕaaʔilatna ʕaaʔilaatna leen baʕadhum b-baladna l-uṃṃ, fa iða iða mustaqbalan ariid ibni yiḥči wiyya jidda, jiddita aw xaala ʕamma uu huwwa ma yiʕruf yiḥči ʕarabi aw yiḥči ʕarabi mkassar šloon

> Even sometimes, when I see the children playing together in the room, I hear them, and some of the words I shout at them from afar, 'My son, speak Arabic'. Yes, and in addition, we have enrolled them in an Islamic Arabic school that teaches lessons in Arabic and teaches the Islamic curriculum, I mean Islamic religion. (…) We say it's a sin, I mean for me, I see it as a catastrophe, why? Because we are supposed to visit our family, our relatives, because some of them are still in our home country. So, in the future, I want my son to be able to speak with his grandfather, his grandmother, or his aunt, and he doesn't know how to speak Arabic or speaks broken Arabic, how would that be?

While these efforts are commendable, it is crucial to recognize that the focus on the Quran and Islamic education primarily promotes Classical and Standard Arabic. This approach, while preserving a form of Arabic, may not effectively support the maintenance of the Iraqi or Syrian dialect. The participants' belief that connection to Standard Arabic will help maintain their dialect highlights a common misconception.

Despite the parents' efforts, maintaining the same level of linguistic and cultural engagement in their children and grandchildren proves challenging. The disconnect grows as these younger family members become more integrated into the German-speaking environment, leading possibly to a gradual erosion of traditional practices. Furthermore, most of the old participants, both Syrian and Iraqi, mentioned the importance of heritage language classes ("Herkunftssprachenunterricht"[87]). These classes are seen as essential not only for language preservation but also for maintaining a connection to cultural identity and heritage, which are necessary for personal and communal coherence in a diaspora setting. They wish for their (future) grandchildren to attend these courses, noting that their own children are already struggling to find the right Arabic words. This sentiment reflects broader findings from a study in 2016 among immigrant families in Hamburg by the University of Hamburg[88], which found that around nine out of ten parents with a migration background deem it important for their children to be taught in their mother tongue.

[87] In heritage language classes, children and adolescents with migration backgrounds can strengthen their knowledge and skills in their mother tongue.
[88] https://www.ew.uni-hamburg.de/ueber-die-fakultaet/personen/neumann/files/bericht-hube-ev.pdf [May 2024]

Most of the old participants noted that while these strategies are effective with small children, they become increasingly difficult to implement with teenagers. As adolescents attend school or enter the workforce, they begin to form their own social environments and networks outside the family. This exposure often accelerates the adoption of German and reduces the influence of home-based language policies and cultural practices. The old speakers expressed that it becomes particularly challenging to enforce language rules or ensure participation in cultural and language classes as these young individuals seek autonomy and integrate more deeply into the broader societal environment in Germany.

Reflecting on these challenges from a personal perspective, Mahir, a 21-year-old Iraqi, explained his motivation for prioritizing German over Arabic, especially when it comes to heritage language education:

> *leʔannahu il luġa l-ʕarabiyya ma raaḥ aḥčiihe aani bass wəyya l-ʕarab, bass il-luġa l-aḷmaaniyya il-akθar innu, istixdaaman ihnaane yaʕni maaku daare aṭubbilhe aani (…), xall anqinn il-luġe l-aḷmaaniyye uw baʕdeen il-ʕarabiyye.*
>
> Because I won't use the Arabic language, only with Arabs, but the German language more, that's why there is no reason to go there [heritage language school]. Let's first learn German and then Arabic.

Another aspect that must be considered is the varying circumstances of language maintenance and attrition among immigrant communities in Germany, which differ significantly between Arabic-speaking and, for instance, Turkish migrants due to their unique migratory contexts and diaspora connections. Turkish communities benefit from a well-established diaspora, characterized by strong and frequent connections to Turkey. These are facilitated by regular family visits in Turkey and a robust network of cultural and educational institutions within Germany. Specifically, the demand and acceptance for heritage language classes are primarily found in larger migrant groups in Germany, which notably include children and adolescents of Turkish origin (Pürckhauer 2020). This robust engagement supports language maintenance across generations, as younger Turkish migrants receive ongoing exposure to their heritage language both in Germany and during visits to Turkey. In contrast, Arabic-speaking migrants, often arriving as refugees from conflict areas, face challenges in maintaining regular physical ties with their homelands. The predominantly digital nature of their diaspora interactions (the

participants mainly mentioned WhatsApp, Facebook and Instagram) does not substitute for the linguistic experience and emotional connection that physical visits provide.

A consistent topic among the younger participants was their use of either a mixed form of Arabic and German or predominantly German when communicating with their siblings. This shift highlights the gradual attrition of pure dialectal use among the younger generation, influenced by their everyday linguistic environment. The young Iraqi, Mahir, described his struggle to speak "proper" Iraqi Arabic even with close family members[89]:

> *hwaaya aku kalimaat yaʕni, eeh uw, aane ma ma ma (...) miyya b-il-miyya ma jaayba yaʕni aku marraat yaʕni maθalan ṃaaṃe itgulli šii kalima, agullilha šinu ha maʕnaatha, innu aani kalima maθalan awwal marra saamiʕa*[90]*, itgulli, haay maʕnaatha hiič uw hiič, agullha awkee awkee tamaam ayy, maθal agullila*[91] *laazim haaye k-kilma laazim daaʔiman marraat itguuliliyyaha ʕala muud agdar afhamhe aw aḥfiḍhe (...) itgilli awkee tamaam, fa hiyya tuʕruf biiya, innu aani šwayye kalimaat jidiida ʕalayya fa ma ayy, šariḥ, aani ma aguul kilme iða ma aʕruf šinu maʕnaathe, ḥatte b-il-luġa l-aḷmaaniyya, ma aguul kilme*
>
> There are many words[92], eeh and, I absolutely don't don't don't get them, I mean sometimes, for example, my mom tells me some word, I tell her, 'What does this mean?' When I for example hear a word for the first time, she tells me, this and that is its meaning. I tell her 'okay, okay, fine, yes'. For example, I tell her it's always necessary to say this word sometimes to me, so I can understand or memorize it. (…) She tells me, 'okay, fine', so she knows about me, that some words are new to me, so no, explanation, I don't say a word if I don't know what it means, even in German, I don't use this word.

The lack of extensive Arabic cultural and educational infrastructure in Germany might further limit opportunities for structured language transmission, placing younger members at a higher risk of language attrition. This comparison underscores the critical role

[89] The young speaker's stuttering during our conversation highlights his struggle with expressing himself in Arabic, indicating a personal insecurity with the language that may stem from limited daily use.
[90] The speaker opts for the suffix *-a* in *saamiʕ-a* ('hear her') rather than the typical Iraqi suffix *-ha* in *saamiʕ-ha*. This choice is likely influenced by the speaker's nine-year residency in Syria, which encompassed a significant portion of his childhood.
[91] The same happens here: *agullil-a* is used where the Iraqi variant *agullil-ha* is expected.
[92] Here it has to be noted that the speaker's difficulties extend beyond mere lexical gaps; they also encompass the pragmatic meanings associated with certain Arabic words, such as the discourse marker *da-* (see 6.2.1), which he uses significantly less frequently than other speakers in the dataset. These challenges arise from the variations in word usage and context-specific meanings, which the speaker occasionally struggles to grasp, as indicated by his need to consult his mother for clarification.

of regular homeland contact and strong community support in language maintenance among immigrants. For Arabic speakers, establishing more structured community support systems could help mitigate language attrition, similar to the Turkish diaspora.

7.2 Formation of a Common Koine between Iraqi and Syrian Groups?

Having explored language variation within the diasporic groups, especially age-related differences, I now shift the focus to another relevant aspect of this study: contact-induced linguistic change. Moving to the second research question that I aimed to answer with my study, it has to be mentioned that the context of Iraqi and Syrian speakers in Germany provided a fruitful setting for examining the dynamics of language contact and potential formation of a common koine. Building on the concept of language contact, Auer (2021, p. 147) suggests that such phenomena typically stem from social conditions that either facilitate, promote, or necessitate communication between speakers of different languages. Furthermore, grammatical aspects, such as the linguistic resources available to speakers, the degree of structural commonality between their languages, and the internal variability within these languages, also play critical roles in determining both the extent and the nature of language contact (see also Section 2.1).

The concept of koineization introduces challenges, notably the potential for cherry-picking specific attributes from a vast list of potential features, leading to ambiguity in determining true instances of koineization. While this research does not position koineization as the primary model for the data, elements within this concept remain pertinent to the investigation. By definition, a koine is a stable language variety that arises from various processes including levelling (Siegel 1985). Given that the speakers interviewed are embedded in different environments and that the groups interact not only with each other but also with other language groups (particularly German), there seems to be little necessity for developing a common linguistic form, especially among young speakers. This lack of necessity is reinforced by the current infrequency of regular exchanges, which are essential for a koineization process to take place.

Additionally, while an immigrant koine typically develops as a stable variety among speakers of different languages or dialects who migrate and form a new community in a non-native region (see Al-Wer 2007), the situation with Iraqi and Syrian speakers in Germany presents unique challenges. The koine that might emerge serves as a means of

communication among the immigrant group but is also influenced by the surrounding dominant language(s). Although Iraqi and Syrian Arabic have significant differences in dialect, both groups share a linguistic heritage that provides a foundation for mutual intelligibility. However, unlike other regional or immigrant koine scenarios where the emerging koine becomes a common, often dominant community language (see Al-Wer 2002), both groups are minorities within a larger German-speaking context. Therefore, the linguistic environment dominated by German probably has an impact on how and to what extent a koine might develop. This context further supports the initial hesitation to fully apply the koineization model to these language groups within Germany.

7.2.1 Contact-Induced Linguistic Change

As we move to the Iraqi and Syrian data, it becomes apparent that accommodation manifests in two distinct directions. Starting with the Iraqi group, Iraqi Arabic data from group conversations show classical elements of linguistic accommodation, specifically convergence, where distinctive Iraqi features such as [č], *da-*, and *wiyya* are notably filtered out. This pronounced variability in the usage of specific linguistic features might indicate a process of language levelling, where features unique to a particular group become less pronounced in mixed group settings. In this context, parallel linguistic structures exist without becoming completely one. It might help the speakers to gain approval from Syrians and feel perhaps more accepted or welcomed. This observation supports therefore the classical expectations of accommodation and illustrates typical behavior in language contact scenarios (see e.g. Kerswill 2004). It is crucial to note that while *da-* lacks a direct equivalent in Standard Arabic, the Syrian Arabic variants [k] for [č] as well as *maʕa* for *wiyya* are consistent with those in Standard Arabic.[93]

In contrast, the increase in the use of *ʕam-* and [h] in group settings among Syrians shows an interplay of convergence and divergence (see 2.2.1), driven by potential factors such as language maintenance, communicative efficiency, and possibly the sociolinguistic profiles of the interlocutors. This might suggest – similar to Miller's study (2005) – that the extent of linguistic accommodation among the first generation of migrants varies depending on the type of linguistic features as well as the nature of interaction, topics

[93] However, linguistic adaptation is not uniform, as illustrated by Holes's study (1983) on the Baharna dialect, where adaptation to dialectal features of Sunni Arabic occurred in a context where Sunnis were the majority. Therefore, it should be noted that the context and social dynamics can significantly influence the direction and extent of linguistic adaptation, as seen in various studies.

discussed, and individual personal profiles. Unlike in the study by Miller (2005), where one group clearly dominates the linguistic interaction, the dynamics observed here are more reciprocal. In this case, Iraqis clearly accommodate towards Syrians, and while Syrians do adapt one feature in response, the usage of *ʕam-* by Syrians moves in a different direction.

Beyond Iraqi and Syrian Arabic, a notable observation from the group discussions is the significant role of German borrowings. Syrian speakers tend to increase their use of these borrowings in group settings with Iraqis. This usage of German borrowings by Syrians could also be seen as a form of accommodation (convergence), where they adapt their language in the group setting with Iraqis. On the one hand, the observed increase in German borrowings among Syrian speakers in group discussions might indicate a greater integration of the specific speakers into German culture or a strategic choice to facilitate communication in a group setting. While it might be easier for Iraqis to adapt their language through the reduction of typical Iraqi/non-shared features, Syrians may not be able to easily adopt typical Iraqi features. Instead, their communication strategy might involve the usage of borrowings to bridge the linguistic gap in interactions. On the other hand, the usage of German loanwords among Iraqi speakers shows notable individual variation: while some increase their use, others reduce it, which reflects personal preferences. This variability among Iraqi speakers underscores that their approach to language adaptation is less uniform and more influenced by personal circumstances.[94]

Moreover, the linguistic choices made by speakers convey significant social information and play a crucial role in shaping societal impressions and stereotypes (see e.g. Garrett 2010). Thus, the use of specific linguistic features or the adoption of a particular dialect within these communities not only facilitates communication but also contributes to the complex interplay of identity formation and social positioning (Ryan and Giles 1982). This becomes particularly noticeable in a diasporic context, where language typically serves as a key marker of cultural identity and group belonging.

The exposure to different Arabic dialects among migrant communities in Germany varies significantly, as revealed by the data from questionnaires (see sections 5.2.2.1 and 5.2.2.2). For instance, 80% of Iraqi participants maintain regular contact with Arabic-speaking individuals, predominantly Syrians, reflecting a high level of

[94] It is important to acknowledge that the small sample size in this study may amplify these individual differences, making it challenging to draw broad generalizations about the entire population.

integration within these communities. This frequent interaction is facilitated by residing in areas densely populated with Arabic speakers. More than half of the Iraqi participants engage daily or weekly with Syrians, often describing these interactions as friendly or educational, occurring in diverse social settings such as supermarkets, schools, and social venues in Nuremberg. Despite this close contact, the choice of language varies; while all the participants reported speaking Iraqi Arabic, some younger speakers prefer German, especially in mixed groups, a trend also reflected in the high usage of German loanwords during group conversations. Interestingly, almost all Iraqis (with only one exception) regularly engage with Syrian media, particularly television series, which might not only increase their exposure to the Syrian Arabic dialect but also potentially raise its status among the community.

On the other hand, interactions between Syrian participants and Iraqis in Germany are less frequent and often occur in more specific settings such as restaurants. The language used among Syrians predominantly remains Syrian Arabic, although some admit to mixing dialects to facilitate communication. Notably, more than half of the Syrian participants reported difficulties in understanding Iraqi Arabic, highlighting dialectal challenges despite regular interactions. This suggests that the prestige or perceived usage of Damascus Arabic could be enhanced by its prominence in popular media, which is widely consumed across the Arab world (Lentin 2011, p. 546).

This media prominence suggests that Damascus Arabic may function as a 'superstrate' within these interactions. Ibrahim's (1986) understanding of prestige, as discussed in Section 3.1, aligns with this, highlighting how a language or dialect perceived as prestigious can have an impact on language usage. Building on this, Hickey (2010, pp. 7–8), as discussed in section 2.1.1, states that as a 'superstrate' language enjoys a higher status within the society where it is spoken. This status discrepancy, often driven by asymmetrical power dynamics in contact situations, significantly influences the outcomes of linguistic contact. For example, the elevated status of Damascus Arabic could subtly influence the vocabulary and speech patterns of Iraqi Arabic speakers, as the superstrate language typically exerts a more substantial influence on the substrate language, primarily through vocabulary borrowing, an open class with a high degree of awareness among speakers.

7.2.2 Pre-Koineization Stage

Koineization often occurs with the emergence of new language varieties due to contact between speakers of mutually intelligible dialects. This process involves the reduction or elimination of distinct linguistic features between different dialects, leading to a more unified language form (Palva 1982, p. 18). Although koineization typically requires a prolonged period of contact before its effects become evident, it is useful to explore three related concepts to understand the observed variation in the data. These concepts are pre-koineization (see 7.2.2), the feature pool, and Educated Spoken Arabic.

The case study does not provide any indications of a normative or standardized koineization. Rather, the individual interviews reveal both considerable variation and a strong adherence to established dialectal norms. However, insights into potential pre-koineization phenomena emerge more clearly from the group conversation data. Such phenomena are particularly apparent in settings where speakers of different dialects engage in unscripted dialogue.

The data analysis shows notable trends of accommodation among the Syrian speakers in group conversations, which seem to indicate an adjustment towards Iraqi Arabic speakers. However, the feature *ʕam-* shows a particular pattern of usage, with its frequency increasing in group settings, which suggests a divergence from Iraqi Arabic by emphasizing it as a typically Syrian feature. This divergence highlights the complexity of linguistic adaptation, where not all features converge uniformly across dialects. Instead, certain features may be maintained or even reinforced as markers of distinct identity within the group. This divergence contrasts sharply with the accommodation (convergence) observed with the [h] suffix, which is used more frequently in group conversations with Iraqis compared to individual settings. While the morpho-phonological feature (h) aligns more with Iraqi usage in group settings, indicating a classic case of linguistic accommodation[95], the morphological feature *ʕam-* seems to serve as a conversationally preferred particle, which might explain its increased use in group conversations. This preference for *ʕam-* in group settings can be interpreted as a strategic use of a

[95] Nevertheless, the descriptive analysis shows a relevant observation (see Section 6.3.1.2) when I split the variants into words that end with a vowel or consonant. The conversational context only slightly influenced the frequency of [h] use, with individual interviews showing an only slightly higher usage after consonants compared to group settings. This subtle difference underscores the need for further research that particularly focuses on the occurrence of [h] after vowels or consonants in the statistical analysis, as it plays an important role in the realization of [h].

distinctly Syrian feature to enhance discourse coherence among speakers familiar with its usage.

Indeed, while the accommodation directions are typically stereotypical, as seen in the avoidance of [č] among older Iraqis and the zero variant [Ø] for (h) among Syrians, the use of *ʕam-* by Syrians does not follow this pattern. This indicates that linguistic accommodation is not a straightforward process but involves selective adaptation where speakers may choose to retain certain features that are significant to their linguistic or cultural identity. It moves in a different direction, not necessarily leading to accommodation but still indicative of characteristic shifts that could occur under different circumstances.

These findings underscore two significant and linguistically distinct directions of adaptation among the Syrian speakers: one morphophonological and the other morphological. This observation supports Miller's (2005, p. 944) assertion that accommodation can influence all levels of language due to the considerable diversity among Arabic dialects.

Overall, the findings of this study indicate that Arabic speakers in Germany are currently experiencing a pre-koineization stage of language contact. This stage involves initial adjustments in linguistic features to enhance mutual understanding while still preserving distinct dialectal identities. The process typically involves selective reduction of certain features and the incorporation of loanwords. The strong contrast between reduced Iraqi use of *da-* vs. increased use of *ʕam-* among Syrians in conversation hints that pre-koineization is not only a binary choice between two features, but also a phase where increased or decreased frequencies of variants already point in the direction in which koineization might head.[96]

Indeed, the linguistic phenomena observed among Arabic speakers in Germany align closely with the characteristics of the pre-koineization phase as described by Siegel (1985, p. 373)[97]. This phase is marked by an initial yet unstabilized state of language contact, where speakers begin to adjust their linguistic repertoire in response to new

[96] If Syrian-Iraqi contact in Germany should intensify, one might see the pre-koineization phase develop into a more normative koineization.

[97] Siegel explicitly describes this as the "unstabilized stage at the beginning of koineization. A continuum exists in which various forms of the varieties in contact are used concurrently and inconsistently. Levelling and some mixing has begun to occur, and there may be various degrees of reduction, but few forms have emerged as the accepted compromise." (Siegel 1985, p. 373).

social and linguistic environments. Several key aspects of this phase evident in my study include:

- **Linguistic accommodation**: The Arabic participants exhibit classic accommodation behaviors by adjusting their language in ways that increase mutual intelligibility with speakers of other dialects. This is consistent with the notion of linguistic accommodation that Siegel (1985) describes as typical for the pre-koineization stage.
- **Emergence of widely accepted compromises**: While the current stage of language contact has not yet resulted in fully stabilized koineized forms, there are indications that certain linguistic forms are beginning to be favored by the community. These emerging preferences may be viewed as the initial steps toward establishing "flexible compromises" where certain features are consistently preferred in cross-dialectal interactions but have not yet resulted in a new koine (see Siegel 1985, p. 373).[98]
- **Minority language status**: The context of Arabic as a minority language in Germany adds another layer to the adaptation process. The speakers are navigating an environment where Arabic is not the societal norm, which influences the degree and manner of linguistic adaptations they are willing to make.
- **Sociolinguistic profiles**: The interactions reflect the global sociolinguistic profiles of the Arabic dialects involved. The differentiated nature of Iraqi and Syrian Arabic prompts speakers to adjust their linguistic output in a way that respects the features of the interlocutor's dialect while still maintaining their own linguistic identity.

As already mentioned in section 2.2.2, Mufwene's (1996) concept of "feature pool" offers a useful framework for understanding the pre-koineization phase that Arabic speakers in Germany are experiencing. This concept posits that when different linguistic varieties come into contact, they create a collective set of potentially competing features for speakers to select from. These selections are guided by factors such as mutual intelligibility, communicative efficiency, and social acceptance. In the context of my study, the "feature pool" comprises six key linguistic elements from both Iraqi and Syrian

[98] Hancock (1971) provides an example of a prekoine, stating that the English spoken among crew members of sixteenth-century English sailing ships functioned somewhat as a koine. This interaction among diverse English dialects likely initiated a process of koineization. However, since the resulting language form was described as a "flexible compromise", it appears it did not advance beyond the pre-koine stage.

dialects.[99] These features provide the raw data input into the consideration of koineization. While these features are actively negotiated in speech, religious expressions and German borrowings are excluded from feature pool consideration, as all speakers are equally exposed to them and do not treat them as contrastive or identity-marking elements. During the pre-koineization stage, there is a noticeable preference for certain features over others. This stage is characterized by active yet incomplete linguistic compromise and adaptation, which is essential for the eventual emergence of a koine. These observations suggest that the Arabic-speaking community in Germany is indeed in a pre-koineization phase. The selective adaptation and the varied preferences for specific features underscore the complexity of this stage. It involves balancing mutual intelligibility with the preservation of distinct linguistic identities, laying the foundation for the emergence of a more stabilized koine, provided there is more intense contact. This convergence would then result in a linguistic structure with reduced morphological complexity relative to the original subsystems (refer to Siegel 1985, pp. 373–374 for further discussion).

Mitchell's (1986) concept of ESA further refines this picture by highlighting how speakers make real-time linguistic decisions in mixed-dialect interactions. ESA addresses how mixed-dialect interactional behavior is managed in an Arabic setting. It describes the emergence of a functionally simplified and more socially neutral variety of Arabic used in interdialectal settings. Mitchell's (1986) perspective on ESA highlights a phenomenon, where more "appropriate" and "acceptable" forms are used. Mitchell (1986, p.14) states that the adaptation processes often aim to avoid stigmatized forms, reflecting broader social sensitivities. He noted that ESA is a result of the increasing need for a functional spoken form of Arabic that is more universally understood across the Arab world than localized dialects. Therefore, ESA suggests that among the competing linguistic features, some are culturally marked and may be perceived as stigmatized. For instance, the Iraqi /č/, which is absent in Standard Arabic, Syrian Arabic, and most other Arabic dialects (such as Egyptian Arabic), is one such feature. Notably, three Iraqis in

[99] These include *wiyya* vs. *maʕa*, the analytic genitive forms *maal* and *tabaʕ*, [k] / [č], *da-*, *ʕam-* and [h] / [Ø] in *-(h)on* and *-(h)a.*

the sample had passed through Egypt on their way to Germany, further adding complexity to their linguistic adaptations. The interplay between Mufwene's and Mitchell's frameworks is particularly useful here. While the feature pool defines the full range of available variants, ESA explains how speakers filter this set during actual interaction. In other words, ESA can be seen as a real-time selection mechanism operating within the broader structure of the feature pool.

While the pre-koineization and feature pool constructs identify which competing variants might be candidates for koineization, Mitchell's ESA concept predicts which features are likely to be eliminated in the process. In conversational settings involving speakers of different dialects, ESA assumes that certain dialectal features will be intuitively stigmatized. For example, the /ɖ/ in *haaɖa* (this) from rural Jordanian Arabic versus the /d/ from Syrian Arabic (Sallam 1980). In mixed group settings, these stigmatized features are typically filtered out to facilitate smoother communication. Thus, ESA provides a framework for understanding how speakers converge towards a less marked, more universally acceptable form of Arabic during interactions.

7.3 Limitations and Future Research

Overall, the datasets created for this study were comprehensive. I successfully developed a sociolinguistic research design specifically for Syrian and Iraqi refugees in the Bayreuth and Nuremberg areas. This process involved building a strong relationship with the refugee communities, carefully selecting both assistants and participants, and collecting the data through meticulous methods, including fieldwork and sociolinguistic interviews. I identified relevant variables and conducted detailed linguistic analyses, supported by thorough statistical analysis. Through this robust approach, I was able to effectively address and answer the research questions posed in the study and provide valuable insights into the linguistic behaviors of Syrian and Iraqi refugees in Germany.

As we move to the discussion of limitations and future directions for this study, it is important to recognize the challenges encountered and the complexities of generalizing findings across the diverse Arabic-speaking diaspora. Drawing parallels with Miller (2005), who noted the difficulty in drawing general conclusions from limited data, I encounter similar hurdles. Miller (2005, p. 944) highlights:

> The list of features above already indicates the numerous variants and mixing that may occur within an individual's speech. It is, however, difficult at this stage to draw general conclusions regarding the general rules of linguistic accommodation in Cairo. Seven speakers do not form a community in a city of ten million! However, when comparing these selected data with a wider corpus, it appears that a number of phenomena might be representative, or need at least wider attention.

A noteworthy aspect regarding the limitations of the analysis is the issue of statistical significance, which involves more than merely identifying differences – it requires a careful evaluation to determine if these differences reflect actual effects or are merely due to random variation. I am aware that the sample is not entirely representative of all Iraqis and Syrians residing in Germany. This aligns with Yarkoni's (2020) critique of the 'generalizability crisis' in research, where scholars often make broad generalizations that their data do not fully support, neglecting crucial variations among speakers. Such oversights can severely limit the broader applicability of findings and, in any case, have long been addressed in sociolinguistics. Nevertheless, this study provides valuable findings on the language variation and adaptation processes among the speech communities.
Moreover, given the individual variability in speech patterns, recognizing each speaker's unique contributions is essential. Thus, although the analysis may suggest general trends, it cannot definitively account for the full spectrum of individual linguistic behavior. In this case, the interplay between quantitative and qualitative methods in linguistic research mentioned by Al-Wer et al. (2022, pp. 33–34) could be taken more into consideration. They describe the distinction between these methods as often 'artificial', as they can complement each other effectively. While quantitative studies rely on data-driven approaches, qualitative insights are also invaluable. Even in quantitative studies, qualitative analysis can provide valuable context and depth. For instance, examining atypical linguistic patterns from "outlier" speakers can offer insights into individual behaviors and broader community trends. By examining such patterns qualitatively, researchers can gain deeper understanding beyond what quantitative analysis alone may tell.

Furthermore, it is essential to consider the linguistic differences between Iraqis who lived in Syria before moving to Germany and those who came directly to Germany. This raises an important question: Are the observed differences linked to their subsequent stay in Germany or already influenced by their prior stay in Syria, possibly reflecting a

stronger adaptation to Syrian Arabic?[100] To draw more definitive conclusions from these observations, a larger sample size and further investigation are required. Specifically, including the previous residence country as an independent variable in the mixed-effects model would allow for a more precise understanding of how prior linguistic environments impact current language use.

The research conducted offers diverse opportunities for more detailed investigation. It became evident that each variable discussed requires further focused research due to the richness of the data gathered and the breadth of linguistic and sociolinguistic features observed but not fully explored. As highlighted in the analysis in Chapter 6, distinctive linguistic behaviors were observed among subgroups, such as young male Syrian speakers who used the analytic genitive form *tabaʕ* more frequently than young female speakers. This finding suggests that a more fine-grained, qualitative analysis could yield deeper insights, particularly in examining the varied uses of *tabaʕ* and *maal*, which appeared in contexts deviating from those traditionally described in grammars of Iraqi Arabic. Further exploration could also consider how in-group and out-group identifications influence linguistic choices and potentially impacting the maintenance or shift of Iraqi or Syrian speech norms. Within the framework of this study, a mixed-effects model could be used to examine interactions between the variables, for instance how age and gender might interact with linguistic choices. While this model provided valuable insights, the complexity of the interactions between numerous dependent and independent variables was not exhaustively explored due to the focus of the main research question. Although interactions between variables were not the central focus, they represent an idea for future research. Investigating these interactions could enhance our understanding of the deeper connections within the data that were not fully addressed in this study and therefore offer potential for more comprehensive findings in the field of sociolinguistics.

Additionally, the active presence of Syrians and Iraqis on social media presents another aspect for future research. Recent developments in computer-mediated communication (CMC) have led to new styles of writing that blend oral and written language characteristics. This development is particularly noticeable in Facebook groups and represents a unique linguistic phenomenon that was not the main focus of this study. However, the extensive use of CMC by the Iraqi and Syrian refugees in Germany suggests that it could significantly enrich the oral corpus-based research. For this study, I also

[100] To adequately respond to this question, a larger sample size is necessary.

collected a small sample of WhatsApp conversations from the same group of speakers. Analysing these communications could complement the spoken corpus in future research, particularly in examining how language use and identity-related factors intersect among the younger generation. The goal would be to explore whether younger participants exhibit specific linguistic features in online conversations differently from older ones. Moreover, this thesis lays the groundwork for future longitudinal studies. Observing how the language of the same speakers develops over time and expanding the corpus with new data could offer valuable insights into language change within the Iraqi and Syrian communities in Germany.

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Appendixes

Appendix A. Declaration of Consent

UNIVERSITÄT BAYREUTH

Einwilligungserklärung – تصريح بالموافقة

Hiermit willige ich ein, dass ich bin über den Zweck und das Vorgehen bei der Erhebung und Auswertung von Daten im Rahmen des DFG-Forschungsprojekts „*Modernity, Migration and Minorities: Three Case Studies of Arabic in Contact*" der Professur für Arabistik an der Universität Bayreuth informiert worden bin und die Hinweise zur Anonymisierung und zum Datenschutz zur Kenntnis genommen habe.

Ich bin damit einverstanden, dass einzelne Angaben als Material für wissenschaftliche Zwecke genutzt werden können.

أعطي موافقتي على تسجيل هذا اللقاء الذي سيتم استخدامه لغرض التحليل العلمي المحض. لقد أُكِّد لي أنَّ جميع البيانات خاضعة لضوابط الخصوصية وإخفاء هوية صاحبها وأنها ستُستَخْدَم لأغراض بحثية فقط.

_____

Vorname, Nachname

_____ _____

Ort, Datum Unterschrift

Appendix B. Questionnaire on Personal Information (Arabic and German)

التاريخ _____ الاسم / اسم العائلة _____

الجنس ذكر ○ أنثى ○

العمر_____

مكان وتاريخ الميلاد _____ ,_____

الجنسية _____ أين كنت تعيش؟ _____

الحالة الاجتماعية ○ متزوج ○ أعزب ○ مطلق

الديانة _____

إذا كنت متزوجًا ، ما البلد / المدينة التي يأتي منها زوجك / زوجتك؟ _____

أين نشأ والدك؟ _____ أين نشأت والدتك؟_____

كم طفلا لديك؟ _____

ما هو أعلى مؤهل تعليمي حصلت عليه؟ _____

ماذا كنت تعمل؟ _____ ماذا تعمل؟ _____

منذ متى تسكن في ألمانيا؟ _____

اين كنت تعيش قبل مجيئك الى المانيا؟ _____ ما هي لغتك الأم؟ _____

ما مدى تقييمك لمهاراتك في اللغة العربية؟

1 = جيد جدا 5 = سيئ جدا	1	2	3	4	5
فصحى					
ألماني					

مستوى اللغة الألمانية ○ A1 ○ A2 ○ B1 ○ B2 ○ C1 ○ C2

كم مرة تستخدم التطبيقات التالية للاتصال؟

1 = أوافق تماما 5 = لا أوافق أبدا	1	2	3	4	5
WhatsApp					
Viber					
Facebook					
Instagram					
أخرى: _____					

ما الخط الذي تستخدمه كثيرًا؟

	أبدا	مرة في الشهر	مرة واحدة في الأسبوع	عدة مرات بالاسبوع	كل يوم	عدة مرات في اليوم
نظام الكتابة العربية						
نظام الكتابة الألماني						
الخط اللاتيني بالأرقام: مثال kaif al7al? (عربيزي)						
أخرى: _____						

مع من تستخدم هذا النموذج المكتوب؟

الأصدقاء ○
الآباء ○
الأشقاء ○
أفراد الأسرة الآخرين ○
أخرى ○: _____

هل تستخدم الخط اللاتيني بالأرقام؟ إذا كانت الإجابة بنعم حيث؟

محادثات خاصة ○
محادثات جماعية ○
مجموعات الفيسبوك ○
منتديات ○
أخرى ○: _____

Vor- und Nachname: _____ **Datum**: _____

Geschlecht: ○ weiblich ○ männlich

Alter: _____

Geburtsdatum und Geburtsort: _____, _____

Nationalität: _____ **Wo sind Sie aufgewachsen?** _____

Religion: _____

Familienstand: ○ ledig ○ verheiratet ○ geschieden

Wo ist Ihr Ehemann/ Ihre Ehefrau aufgewachsen? _____

Wo ist Ihr Vater aufgewachsen? _____ **Wo ist Ihre Mutter aufgewachsen?** _____

Wie viele Kinder haben Sie? _____

Was ist Ihr höchster Bildungsabschluss? _____

Derzeitiger Beruf: _____ **Letzter Beruf**: _____

Seit wann leben Sie in Deutschland? _____

Wo haben Sie vorher gelebt? _____ **Muttersprache/n**: _____

Wie gut bewerten Sie Ihre Sprachkenntnisse?

1 = sehr gut/ 5 = sehr schlecht	1	2	3	4	5
Hocharabisch					
Deutsch					

Deutsch-Sprachniveau: ○ A1 ○ A2 ○ B1 ○ B2 ○ C1 ○ C2

Wie oft verwenden Sie folgende Apps zur Kommunikation?

1 = sehr häufig/ 5 = gar nicht	1	2	3	4	5
WhatsApp					
Viber					
Facebook					
Instagram					
Andere: _____					

Welche Schrift verwenden Sie am häufigsten?

	Mehrmals täglich	Täglich	Mehrmals pro Woche	Einmal pro Woche	Einmal pro Monat	Nie
Arabisches Schriftsystem						
Deutsches Schriftsystem						
Lateinische Schrift mit Zahlen → Bsp: kaif al7al? (Arabizi)						
Andere: _____						

Verwenden Sie Arabizi? Wenn ja, wo?	**Mit wem verwenden Sie diese Schriftform?**
○ Private Chats ○ Gruppen-Chats ○ Facebook-Gruppen ○ Online-Foren ○ Andere: _____	○ Freunde ○ Eltern ○ Geschwister ○ Andere Familienmitglieder ○ Andere: _____

Appendix C. Protocol for Additional Observations (after the interviews)

Protokoll nach dem Interview

Name:

Ort der Interviewdurchführung:

Beziehung zum Interviewer:

Waren andere Personen während des Interviews anwesend?

Nach allen Interviews: Besteht ein familiäres Verhältnis zu einem anderen interviewten Teilnehmer?

Appendix D. Questionnaire on Contact Behaviour (Arabic and German)

Vielen Dank, dass wir bereits ein Interview mit dir durchführen durften. Da uns leider noch ein paar Informationen für die Forschung an der Universität Bayreuth fehlen, wäre ich dir sehr dankbar, wenn du die folgenden Fragen beantworten könntest. Alle Daten werden anonym behandelt und werden nur für Forschungszwecke verwendet.

Bitte antworte so detailliert und vollständig wie möglich. Du kannst auf Deutsch oder auf Arabisch antworten.

Vielen Dank für deine Unterstützung!

شكرًا لك على السماح لنا بإجراء مقابلة معك. نظرًا لأننا ما زلنا نفتقد بعض المعلومات للبحث في جامعة بايرويت ، سأكون ممتنًا للغاية إذا أمكنك الإجابة على الأسئلة التالية. يتم التعامل مع كل شيء بشكل مجهول ويستخدم فقط لأغراض البحث العلمي.

يمكنك الإجابة باللغة العربية أو الألمانية. الرجاء الإجابة بالتفصيل وبشكل كامل قدر الإمكان.

شكرا لك على مساعدتك.

* Gibt eine erforderliche Frage an

1. E-Mail-Adresse *

2. 1. Name / الاسم *

3. Handynummer / رقم الموبايل

4. 2. Aus welchem Stadtbezirk in Damaskus (oder in einer anderen Stadt) kommt dein Vater?/ من أي منطقة في دمشق (أو مدينة أخرى) والدك؟ - مسقط الرأس *

5. 3. Aus welchem Stadtbezirk in Damaskus (oder in einer anderen Stadt) kommt deine Mutter? / من أي منطقة في دمشق (أو في مدينة أخرى) والدتك؟ *

6. 4. Aus welchem Stadtbezirk in Damaskus (oder in einer anderen Stadt) kommt deine Ehefrau/ dein Ehemann? / من أي منطقة في دمشق (أو في مدينة أخرى) زوجتك / زوجك؟

10. 7. Welche Herkunft hatten diese Araber? Aus welcher Stadt kamen sie? / ما هو أصل هؤلاء العرب؟ من أي مدينة هم؟

11. 8. Wie oft hattest du Kontakt zu Irakern? / كم مرة تواصلت مع ناس من العراق؟ *

Markieren Sie nur ein Oval.

- ( ) كل يوم / täglich
- ( ) عدة مرات في الأسبوع / mehrmals in der Woche
- ( ) عدة مرات في الشهر/ mehrmals im Monat
- ( ) نادرا / selten
- ( ) أبدا / nie
- ( ) Sonstiges: _____

12. 9. Welche Beziehung hattest du zu ihnen? / كيف كانت علاقتك بهم؟ *

Wählen Sie alle zutreffenden Antworten aus.

- [ ] Freunde / أصدقاء
- [ ] Arbeitskollegen / زملاء العمل
- [ ] Schulkameraden/ Universitätskommilitonen / زملاء الجامعة / زملاء الدراسة
- [ ] Sonstiges: _____

13. 10. Wo genau hast du diese Iraker getroffen?/ أين بالضبط قابلت هؤلاء اللعراقيين؟ *

Wählen Sie alle zutreffenden Antworten aus.

- [ ] Supermarkt/Geschäfte / سوبر ماركت / محلات
- [ ] Arbeit / في العمل
- [ ] Schule/Universität / في المدرسة / الجامعة
- [ ] Restaurants / في المطاعم
- [ ] Shisha-Bars / في الشيشة بار
- [ ] Zuhause / في البيت
- [ ] Sonstiges: _____

14. 11. Hast du Kontakte zu Irakern in Deutschland? / هل لديك اتصالات مع اللعراقيين في ألمانيا؟ *

Markieren Sie nur ein Oval.

- ◯ Ja / نعم
- ◯ Nein / لا
- ◯ Sonstiges: _____

15. Welche Herkunft haben diese Iraker? Aus welcher Stadt kommen sie? / ما هو أصل هؤلاء اللعراقيين؟ من أي مدينة هم؟

_____

_____

_____

_____

_____

16. 12. Wie oft hast du Kontakt zu ihnen? / كم مرة كنت على اتصال معهم؟

13. 10. Wo genau hast du diese Iraker getroffen?/ أين بالضبط قابلت هؤلاء اللعراقيين؟ *

Wählen Sie alle zutreffenden Antworten aus.

- [ ] Supermarkt/Geschäfte / سوبر ماركت / محلات
- [ ] Arbeit / في العمل
- [ ] Schule/Universität / الجامعة / في المدرسة
- [ ] Restaurants / في المطاعم
- [ ] Shisha-Bars / في الشيشة بار
- [ ] Zuhause / في البيت
- [ ] Sonstiges: _____

14. 11. Hast du Kontakte zu Irakern in Deutschland? / هل لديك اتصالات مع اللعراقيين في ألمانيا؟ *

Markieren Sie nur ein Oval.

- ◯ Ja / نعم
- ◯ Nein / لا
- ◯ Sonstiges: _____

15. Welche Herkunft haben diese Iraker? Aus welcher Stadt kommen sie? / ما هو أصل هؤلاء اللعراقيين؟ من أي مدينة هم؟

_____

_____

_____

_____

_____

Appendix E. Raw Frequency Counts for Each Linguistic Feature

Group	Context	Speakers	Borrowings	Allah Expressions	Prefix *da-*	[č] for [k]	[k] for [č]	*maal*	*Iḍaafa*	*maʕa*	*wiyya*
Iraqis	Individual	Amira_YF	158	70	20	210	10	23	59	2	47
		Ahmad_OM	52	27	25	76	12	6	82	2	24
		Adam_YM	56	27	4	147	1	16	93	0	30
		Bilal_YM	86	21	11	141	2	20	55	4	19
		Dalia_YF	57	43	16	124	8	5	82	2	44
		Mahir_YM	50	6	1	97	0	8	24	0	6
		Munir_OM	53	36	47	141	11	14	133	0	1
		Sabiha_OF	28	176	22	114	3	6	113	0	21
		Samira_OF	26	87	11	77	4	11	69	1	12
		Safa_OF	40	8	11	171	4	18	114	0	28
	Group	Amira_YF	54	8	7	57	8	7	50	9	17
		Adam_YM	54	5	2	30	0	8	34	0	5
		Munir_OM	20	7	16	21	15	4	74	4	9
		Sabiha_OF	3	27	4	64	22	3	82	7	9
		Total	737	548	197	1470	100	149	1064	29	31
Group	**Context**	**Speakers**	**Borrowings**	**Allah Expressions**	**Prefix *ʕam-***	**[h] suffix**	**[ø] suffix**	***tabaʕ***	***Iḍaafa***	***maʕa***	***wiyya***
Syrian	Individual	Ashraf_YM	104	5	37	13	110	27	79	100	1
		Asma_OF	45	16	15	190	6	1	176	48	6
		Shahad_YF	38	3	43	7	48	1	70	43	0
		Huda_OF	11	37	14	24	175	0	143	36	0
		Jalal_OM	20	41	18	22	89	4	109	42	2
		Khalil_OM	13	96	16	31	99	7	108	25	3
		Murad_YM	34	42	22	15	79	3	71	34	4
		Yasmin_YF	39	4	21	143	2	0	100	48	4
		Yara_YF	49	2	32	2	91	2	92	73	0
		Yahya_OM	74	64	63	28	114	1	174	26	1
	Group	Ashraf_YM	79	3	29	9	26	3	11	18	0
		Huda_OF	7	46	25	10	45	0	46	12	0
		Jalal_OM	14	11	18	13	45	5	64	14	0
		Yara_YF	17	5	61	4	16	1	24	13	0
		Total	544	375	414	511	945	55	1267	532	21

Appendix F. Outcomes of Statistical Analysis (GLMM)

			Allah Expressions (Iraqis)	Allah Expressions (Syrians)	Borrowings (Iraqis)	Borrowings (Syrians)	Prefix *da-*	Prefix *ʕam-*
Validation	*Conditional R2*		0.998	0.998	0.997	0.997	0.991	0.991
	Marginal R2		0.41	0.696	0.747	0.483	0.345	0.509
	AIC		251.6922	673.1246	1520.646	485.0275	185.5681	75.02605
	AIC NULL		1659.3999	875.5711	1872.597	1368.092	210.1038	389.33918
	BIC		254.9	676.3	1523.8	488.2	188.8	78.2
Random Effects	*Variance*		0.6504	0.4068	0.1039	0.3328	0.4038	0.09082
	Std.Dev		0.8065	0.6378	0.3223	0.5769	0.6355	0.3014
Intercept	*Estimate*		5.6601	5.85839	6.81139	6.59678	5.07034	6.48928
	Std. Error		0.25588	0.20301	0.10262	0.18296	0.2032	0.09637
	Pr(>|z|)		**<2e-16 *****	**< 2e-16 *****	**< 2e-16 *****	**<2e-16 *****	**< 2e-16 *****	**<2e-16 *****
	Confidence interval	*low*	5.1585804	5.46048873	6.61026664	6.2381913	4.67208227	6.30039877
		High	6.1616287	6.2562871	7.0125175	6.9553627	5.4686055	6.6781549
Age	*VIF*		1.04	1.04	1.04	1.04	1.04	1.04
	Estimate		0.26419	1.48759	-0.90772	-0.8814	0.82558	-0.08864
	Std. Error		0.52155	0.41374	0.20907	0.37327	0.41299	0.19599
	Pr(>|z|)		0.612	**0.000324 *****	**1.41e-05 *****	**0.0182 ***	**0.0456 ***	0.6511
	Confidence interval	*low*	-0.7580432	0.67668379	-1.31750079	-1.6129885	0.01612783	-0.47278351
		High	1.2864135	2.3831873	-0.4979457	-0.1498067	1.6350265	0.2954984
Gender	*VIF*		1.04	1.04	1.04	1.04	1.04	1.04
	Estimate		-0.76812	0.85678	0.33666	0.29293	-0.18069	0.33998
	Std. Error		0.52155	0.41373	0.20907	0.37327	0.41299	0.19599
	Pr(>|z|)		0.141	**0.038372 ***	0.107	0.4326	0.6617	**0.0828 .**
	Confidence interval	*low*	-1.7903447	0.0458793	-0.07311628	-0.4386583	-0.99012662	-0.04416678
		High	0.2541122	1.6676864	0.7464348	1.0245217	0.6287542	0.7241183
Context	*VIF*		1	1	1	1	1	1
	Estimate		-1.08938	0.46007	0.39637	0.67543	-0.23099	0.54329
	Std. Error		0.03115	0.03322	0.02155	0.02335	0.04502	0.03103
	Pr(>|z|)		**<2e-16 *****	**< 2e-16 *****	**< 2e-16 *****	**<2e-16 *****	**2.88e-07 *****	**<2e-16 *****
	Confidence interval	*low*	-1.1504341	0.39510149	0.35413016	0.629662	-0.31922855	0.48248053
		High	-1.0283288	0.5253465	0.4386021	0.7212057	-0.1427573	0.6041003

Count Variables

			maal / lḍaafa	*tabaʕ / lḍaafa*	*wiyya / maʕa* (Iraqis)	*wiyya / maʕa* (Syrians)	[č] / [k]	[h] / [Ø]
Validation	*Conditional R2*		0.1	0.424	NA (no variance)	0.881	0.31	0.623
	Marginal R2		0.058	0.333	0.212	0.851	0.197	0.109
	AIC		878.5149	376.6895	175.9528	176.6557	658.9129	1082.715
	AIC NULL		881.2582	381.0141	199.6328	174.5195	706.9492	1085.086
	BIC		904	402.6	194.5	198.2	685.7	1109.1
Random Effects	*Variance*		0.1543	0.5202	0	0.8254	0.5388	4.49
	Std.Dev		0.3928	0.7212	0	0.9085	0.734	2.119
Intercept	*Estimate*		-2.1274	-3.8484	-1.8651	-11.3521	-2.5336	-0.4229
	Std. Error		0.1842	0.3891	0.2202	1215.7103	0.287	0.6838
	Pr(>|z|)		**<2e-16** ***	**< 2e-16** ***	**< 2e-16** **	0.993	**< 2e-16** ***	0.53625
	Confidence interval	*low*	-2.4883792	-4.6111172	-2.2966829	-2394.100647	-3.0960813	-1.7631959
		High	-1.76648727	-3.0856798	-1.4335215	2371.396353	-1.971181	0.9173291
Age	*VIF*		1.04	1.09	1.03	1.02	1	1.04
	Estimate		-0.8018	-1.5211	0.05094	0.7063	1.2836	0.7226
	Std. Error		0.3187	0.6619	0.41936	0.7782	0.5562	1.383
	Pr(>|z|)		**0.0119** *	**0.021561** *	0.903	0.364	**0.021** *	0.60132
	Confidence interval	*low*	-1.4264528	-2.8184016	-0.770987	-0.8190225	0.1934899	-1.9879515
		High	-0.17710744	-0.2237629	0.8728686	2.231527	2.373657	3.433179
Gender	*VIF*		1.04	1.08	1.02	1.02	1	1.04
	Estimate		0.1448	2.5718	0.0131	0.5025	-0.2534	-1.8272
	Std. Error		0.3187	0.7337	0.44202	0.7806	0.5547	1.383
	Pr(>|z|)		0.6496	**0.000456** ***	0.976	0.52	0.648	0.18644
	Confidence interval	*low*	-0.4798992	1.133776	-0.8532447	-1.0275118	-1.3405489	-4.5378388
		High	0.76956865	4.009876	0.8794462	2.032515	0.833724	0.8834509
Context	*VIF*		1	1	1.02	1	1	1
	Estimate		-0.4915	0.3911	2.35059	-15.9491	1.8544	0.6218
	Std. Error		0.2608	0.4331	0.41626	2431.4206	0.2669	0.235
	Pr(>|z|)		**0.0595** .	0.366483	**1.63e-08** ***	0.995	**3.69e-12** ***	**0.00816** **
	Confidence interval	*low*	-1.0026104	-0.4577438	1.5347378	-4781.445916	1.331354	0.1611157
		High	0.01959262	1.2400058	3.1664396	4749.547808	2.377467	1.0824659
German Borrowings	*VIF*		1	1.05				
	Estimate		3.2946	3.7271				
	Std. Error		0.4245	0.5517				
	Pr(>|z|)		**8.38e-15** ***	**1.43e-11** ***				
	Confidence interval	*low*	2.46263	2.6457025				
		High	4.126498	4.80841468				

Binary Variable