A Sociolinguistic Study of Code Choice among Saudis on Twitter

by

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ABSTRACT

The present study is an attempt to explore a new dimension of language use: how Arabic is utilized in the social media, Twitter in particular. It attempts to examine codeswitching (CS) in its written form between standard Arabic (SA) and Saudi dialect (SD). It aims to answer three research questions, namely:

1. What are the functions of using CS on Saudi Twitter? Are these functions different from the functions of CS in face-to-face interactions?

2. Do patterns of CS use differ by gender and education?

3. Do patterns of CS use differ by topic?

The current study adopts the sociolinguistic approach and provides a qualitative descriptive and quantitative analysis of 7350 tweets which were collected between December 2016 and July 2017, from 210 Saudi Twitter accounts diversified in terms of gender and education. The goal was to compare the motivations for CS in the written form with those motivations that have been identified in face-to-face interactions and to explore whether CS patterns would differ by gender and education. An additional 500 tweets were collected to investigate whether or not CS patterns would change by topic.

The findings revealed that the Saudi Twitter community utilized SA more than the SD. The study revealed that CS to SA is correlated with prestige, importance, sophistication,

and seriousness. It revealed that the Saudi Twitter community switched to SA for the following social motivations:

1. to introduce formulaic expressions

2. to emphasize a point

3. to quote

4. to shift from comic to serious tone

5. to take a pedantic stand.

In contrast, the SD or the Low variety is associated with sarcasm, informality, low-prestige, and everyday topics. It revealed that the Saudi Twitter community switched to the SD for the following social motivations:

1. for a specific intended meaning

2. for sarcasm and criticism

3. for quotations

4. for exemplifying and simplification

5. for introducing daily-life sayings

6. for scolding and personal attack or insult

7. for common usage.

Regarding the role of topic in CS patterns, the present study provided evidence against Ferguson's prediction (1959) in which he associated code choice with the topic and situation. It revealed that CS occurred in different contexts that varied in their formality and

informality. Therefore, the study provided evidence that CS occurs to perform intended functions.

As for gender, the present study found that men utilized SA more than women, and this confirms previous findings of Ibrahim (1986), and Abd-El-Jawad (1987), Badawi (1973), and Haeri (1996a), Schmidt (1974), and Walters (1996) that women with the same level of education as men use SA less than men.

Regarding education, the present study found that the Saudi Twitter users with high and college education used SA more than their counterparts with less than college education. However, the current study should have considered age in addition to gender and education, because education by itself might be "a proxy variable" that could act on behalf of other less obvious independent variables (Al-Wer 2009). The findings of the present study suggest studying each community independently as each community differs in terms of its social variables, language attitudes, perceptions, and language policies. Finally, the study emphasizes the importance of teaching SA to Arabic learners, placing less focus on dialects to learners due to the stability of SA, and designing as well as developing curriculums accordingly.

CHAPTER 1

Introduction

1.1 Overview

The Arabic language landscape has not significantly changed in the past 15 centuries, from the pre-Islamic period through the present day, particularly in terms of the existence of various dialects and variations spoken in different geographical areas of the Arabian Peninsula along with a dominant dialect (often referred to as the "High code (henceforth "H"). Furthermore, according to early Arabic sources the dominant dialect was Classical Arabic as we came to know it today and as was standardized by early Arab grammarians and the dialects then were not as divergent as modern day dialects[1]. Prochazka (1988) divided modern Saudi Arabian dialects into the Southern Ḥijāz and the Tihāma as well as the Najdī and Eastern Arabian dialects (p. 3). On the other hand, Al-Darsooni (1434 H/2013, pp. 16-17) and Aldosaree (2016, p. 16) divided the dialects that are spoken in Saudi Arabia into five main dialects in Saudi Arabia: Northern, Eastern ("Gulf"), Western ("Ḥijāzī"), Najdī, and Southern ("Janūbī") as Figure 1.1 shows.

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[1] For discussions to do with variations between dialects then, see Sībawayh (d. 796), Ibn Faris (d. 1004), and Ramaḍān ʿAbd al-Tawwāb (1999).

Figure 1.1 Dialects Map in Saudi Arabia.
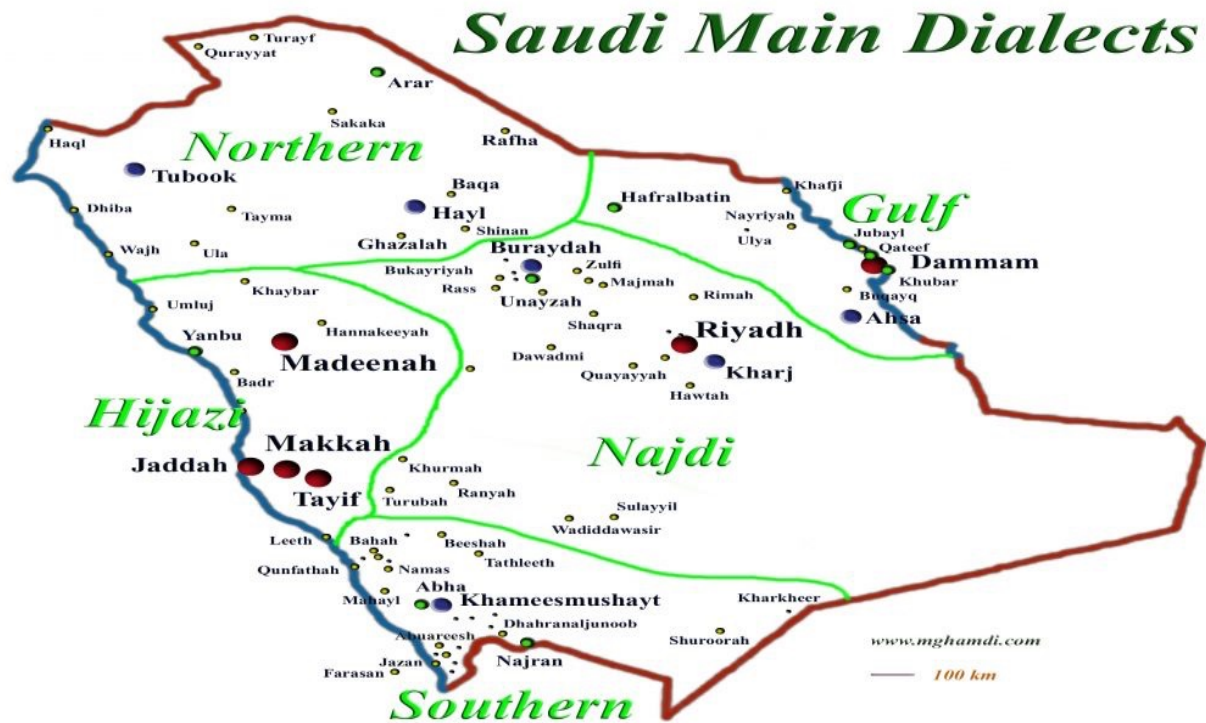
The Saudi dialectal map was retrieved from: http://journal.wrocah.ac.uk/article/a-perceptual-dialect-map-of-western-saudi-arabia/

Aldosaree (2016) stated that the central Najdī dialect is perceived as the prestigious dialect among all Saudi dialects because it is the variety that the royal family speaks. Al-Essa (2009, p. 206), reported a contradictory view, claiming that the Najdī dialect is classified as "Bedouin" dialect (as opposed to sedentary). In reality, there are some studies that attempted to describe the dialects in Saudi Arabia based on specific regions such as Ingham (1994), Al-Essa (2009), and Al-Rojaie (2013) who focused on the Najdī dialect. Al-Azraqi (1998, 2010), Asiri (2009), Nakshabandi (1988), and al-Shahrani (1988) focused on some dialects in the southwest of Saudi Arabia. Al-Mozainy (1981) studied the vowel alternation in the Bedouin Ḥijāz dialect; Il-Hazmy (1975) studied the dialect of Ḥarb in the west of Saudi Arabia; Al-Jehani (1985) studied the dialect of Mecca; and al-Shehri (1993) studied the impact of urbanization on the linguistic

2

behavior of urbanized rural immigrants in Ḥijāz. Al-Shammiry (2007) studied syntactic aspects of the Turaif in the north side of Saudi Arabia. Prochazka (1988) studied the phonology and the morphology of many dialects in Saudi Arabia, but not all of them.

There are many phonological differences in these various dialects; for example, in the Ḥijāzi dialect, speakers articulate the sounds /ð/ as /d/ or /z/, and /θ/ as /t/ or /s/ (Aldosaree, 2016). Speakers of the Najdī dialect replace /k/ with /ts/, and /g/ with /dz/ (Al-Essa, 2009; and Al-Rojaie, 2013). Al-Azraqi (1998) and Al-Darsooni (1434 H/2013) stated that the classical features such as *kaskasah* (the changing of the feminine pronominal suffix -ik to -is in pausal form) and *kaʃkaʃah* (the changing of the feminine pronominal suffix -ik to -iʃ in pausal form) are articulated in the Najdī dialect, and in some parts of the south-west of Saudi Arabia. Al-Darsooni (1434 H/2013) reported that in some parts of southwest of Saudi Arabia, some tribes articulate /dʒ/ as /j/, e.g., *jamal* "camel"; they also omit the glottal stop. These local dialectal variations, among others, were not found in my data. However, some of the collected tweets used a register in the middle between the local low dialects and SA. It apparently evolved as a result of the dialectal contact between various Saudi local dialects in schools, universities, and working environments across the different regions and provinces, and through TV shows, in addition to other factors. Consequently, I considered this variety as supradialect, and it is equated with the Saudi dialect (henceforth SD) throughout the present study although it needs more descriptive studies. In other words, I categorized the varieties in Saudi Arabia in the present study into three levels:

1. Standard Arabic (SA) including both Classic Arabic (henceforth CA) and Modern Standard Arabic (henceforth MSA).
2. A middle variety which is the Saudi dialect (SD) or the Saudi supradialect.

3. The local dialects or the plain dialects.

The present study focused on code-switching (henceforth CS) between the first two varieties: SA and the SD.

1.2 Objectives of the Dissertation

According to Statista website, the market research company that offers online access to statistics and market intelligence, the number of Twitter users in Saudi Arabia reached 4.57 million in 2015 (Digital Market Outlook, 2016). Similarly, Business Insider, a financial and business news website, conducted data analysis to determine what percentage of different countries' online populations actually use Twitter. Surprisingly, their investigation revealed that 41% of the Saudi online population uses Twitter, which is a higher percentage than any other country (Smith, 2013). In Saudi Arabia, Twitter is more popular than Facebook and Google+, due to its "micro-blogging" format with text-based posts limited to 140 characters, although it recently increased to 280. This feature makes the platform faster and more attractive to use. Another main reason Twitter is a popular communication outlet for Saudi Arabians is that it allows them to express and share their ideas, thoughts, and opinions freely. Moreover, it provides an ideal environment for discussions among people from all Saudi regions. The growth of Twitter use in Saudi Arabia may be a result of the platform's accommodation of code-switching, which allows for the use of different varieties of Arabic. This feature is particularly relevant to a community rich in dialects and language variations discussed in the previous section.

Electronically-mediated communication (EMC), as facilitated by Twitter, provides a new means of formal and informal communication for Saudis with different dialectal backgrounds as it has features similar to speech, writing, or a mix of both. In this way, Twitter's unique communication features make it a phenomenon worth investigating in the Saudi context. For

example, EMC encourages people to use the Low (L) variety in written texts. In particular, Saudi Twitter users routinely write in both Standard Arabic and colloquial Arabic. Gordon (2011) states that "vernacular Arabic has simply been absent from the literary sphere, but it is becoming increasingly 'written' through this ubiquitous medium of communication among younger generations of Arabic speakers" (p. 5). This study examined code choice and the motivations behind the code-switching that occurs in Saudi tweets by collecting data from Twitter. Twitter is not the only social media service, but it is significant that it has become the most popular subject of research and studies in the academic field in comparison to other social media such as Facebook, Google+, and Flickr. Twitter has gained in popularity due to the following features:

1. Message size: As messages are short, Twitter is comparable to SMS, whereas Facebook posts, emails, and blog posts vary in terms of length, which might result in unbalanced, incomparable corpora.

2. Sample size: There is greater potential to collect large amounts of data because millions of tweets are published on Twitter on a daily basis.

3. Twitter provides metadata such as usernames, the date the user account was created, language, and many other aspects.

4. Availability is one of the most significant features, as most of Twitter's data and tweets are available to the public, even to those who do not have Twitter accounts.

5. Accessibility: Data can be accessed easily and collected via Application Programming Interfaces (APIs), and can then be exported to various file formats, such as SVC, Excel, and so on.

The influence of Twitter on Arabic is a phenomenon worth investigating from a linguistic perspective, as it represents an interesting topic of study that can be examined from different

angles including how Twitter impacts the use of dialects and colloquialism in Saudi Arabia and conversely how it influences use of SA or High (H) variety. For example, based on some personal observations, users tend to use a formal register of words and sentences in their tweets even in informal situations where the L variety should be used according to Ferguson (1959). Consider the following tweet where the user used the H variety:

Tweet 1.1

لا يزال جرح الثلاثية يدمي كبد الاتحادي قبل الهلالي والنصراوي
وجاء الإعلان عن مباراة #الاهلي_برشلونه ليفتق الجرح من جديد

↩   ⟲ 3   ♥ 1   •••

"The wound that was caused when Al-Ahli [A Saudi soccer team] beat Al-Etihad [Another Saudi soccer team] 3-0 is still bleeding, and the announcement of such an important match between Al-Ahli and Barcelona reopens and worsens this bleeding wound."

This tweet shows use of formal Arabic in a soccer commentary context, in which informal Arabic should have been used as Ferguson (1959) claimed. There is, for some reasons, an absence of local dialects and colloquialism, despite the Saudi society being rich in dialects. In contrast, users sometimes tend to use their local dialects only to serve certain purposes, such as sarcasm, humor, and expressions of anger or happiness, or on some occasion to pass on a coded message as in the following tweet:

Tweet 1.2

<div dir="rtl">

#اهمال_جامعه_الباحه٥

شوفوني علمتكم لا ينتفخ العلم زيادة ثم يجي عرب من فوق ينثرون الاول والتالي الا كلن يفغر من وسط راسه اللهم بلغت

</div>

↩   ⟲ 77   ♥ 23   •••
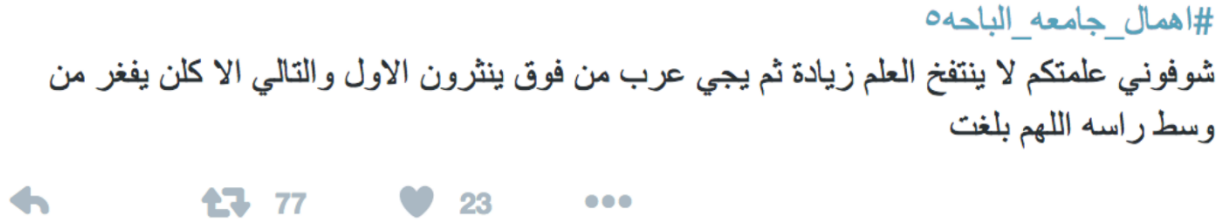
"Look, I warned you about solving your dilemma, and the necessity to reform your system, before the people who above you [the king] begins his investigation, and scatter the first and the last, then all of you will undergo an ordeal."

According to Ferguson (1959), a formal register should be used for the tweet due to the serious nature of the content, although the user utilized his local dialect to convey his message, which is basically a warning to the president of a Saudi university in his hometown because both of them, the user and the president, are originally from the same area. Both of them speak Janoubi (Southern) dialect, which is considered in Saudi Arabia one of the most difficult and non-understandable dialects. Therefore, the user's choice to use his own dialect as opposed to a more formal register indicates that the tweet has more of an impact on those who read it, particularly the president of the university.

The sheer abundance of different varieties of Arabic motivated this study on code choice on Twitter. That is, the Arabic linguistic situation is complex because several different varieties coexist: 1) Classical Arabic (CA), the language of the Qur'an, 2) Modern Standard Arabic (MSA), the written language of literature, journalism, and education, 3) the spoken colloquial varieties, and 4) Educated Spoken Arabic (ESA), which occupies a level between the standard and colloquial varieties. Therefore, research on how speakers of Arabic deal with these linguistic complexities is relevant, particularly in such a public space as Twitter. Certainly, tracing and investigating how such codes and varieties are utilized on Twitter should unveil a range of intriguing findings.

Code-switching is a creative communicative act employed for different pragmatic and sociolinguistic purposes, such as a mechanism for identity negotiation, situational marking, social-group membership, upward mobility, social solidarity, face management, discursive salience, and linguistic economy (Blom and Gumperz 1972; Gumperz 1982; Bentahila 1983; Appel & Muysken 1987; MyersScotton 1993b; Bhatt and Bolonyai (2011); Albirini 2010, 2011). By investigating code choice in the Saudi speech community on Twitter, the present study contributes to the study of diglossia and bidialectal CS within the context of social media.

To my knowledge, little has been investigated on this topic. The vast majority of studies in the Arabic context focused on the syntactic aspects of CS (e.g., Bassiouney, 2006; Belazi, Rubin, and Toribio, 1994; Boussofara-Omar, 1999; Eid, 1988, 1992) as well as CS in multilingual speech communities (e.g., Bentahila, 1983; Bentahila & Davies, 1983; Belazi, 1991; Safi, 1992; Al-Mansour, 1998; and Al-Enazi, 2002; among others). Only a few studies have examined CS between SA and dialectal Arabic (DA) (e.g., Eid, 1982, 1988; Boussofara-Omar, 1999; Saeed, 1997; Bassiouney, 2006; and Albirini, 2010, 2011). There is also a small number of studies on CS in social media in the Arabic context, such as Eldin (2014), Alfaifi (2013), Kosoff (2014), Albirini (2016). Therefore, this study seeks to bridge the gap by contextualizing the study of CS between varieties within the framework of the wider discussion of CS and via the written form on Twitter.

Crucial variables that the current study examined including the roles of gender and education level on CS via Twitter. Due to the lack of agreement regarding the issue of language use and gender, as will be seen in the literature review in chapter 3 of the current study, the question of how gender and education levels affect Saudis' code choice on Twitter naturally arises. This study investigated differences of gender and education level in terms of code choice

on Twitter in Saudi Arabia, where the overall literacy rate is almost 100%, as illustrated in

Figure 1.2.

Figure 1.2 The Literacy Rate in Saudi Arabia among its Population Aged 15 and Older.

LITERACY

Literacy rate among the population aged 15 years and older

%								
100								
80								
60								
40								
20								
0	1975	1980	1985	1990	1995	2000	2005	2010

● Male   ● Female   ● Total

Source: UNESCO Institute for Statistics
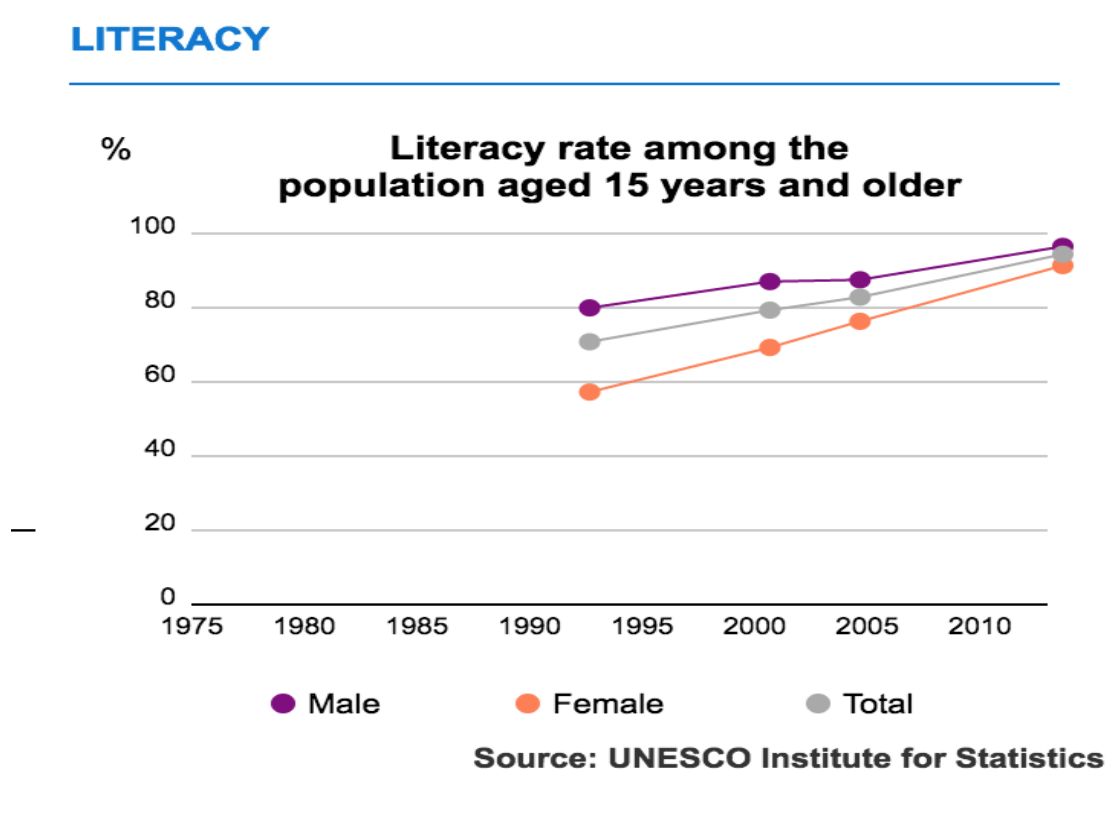
Lastly, the current study attempts to examine whether the functions of CS, as identified

by research pioneers who investigated the social motivations of CS (e.g., Gumperz, 1982), are

applicable to a bidialectal speech community but is usually a monoculture community.

Moreover, Appel and Muysken (1987) pointed out that the functions of CS vary from one

community of speakers to another. Therefore, this study contributes to the literature on CS by

filling the gaps regarding the social motivations of CS in written language on Twitter and

comparing them to the motivations that have been identified for other contexts in the literature.

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1.3 Research Questions

The present study aimed to examine the motivations behind CS at the written level because they might be different due to the channel of language production. Furthermore, because Twitter is, by its nature, a written communication channel, the Twitter user writes his/her tweets consciously. It is therefore predicted that language use and code choice is a rational and conscious process, making CS a way of achieving a communicative (conscious) function. In addition, with respect to gender and education differences, the study aimed to explore the role of gender and education in code choice. Lastly, the present study aimed to investigate the role of topic in code choice. Accordingly, this study aimed to answer the following research questions:

1. What are the functions of using CS on Saudi Twitter? Are these functions different from the functions of CS in face-to-face interactions?

2. Do patterns of the use of CS differ by gender and education?

3. Do patterns of the use of CS differ by topic?

1.4 Organization of the Dissertation

This dissertation includes five chapters. Chapter 1 is an introduction, significance of the study, basic assumptions, and research questions. Chapter 2 focuses on the terms relevant to code-switching and reviews the code-switching literature from a sociolinguistic perspective, in addition to considering the variables of gender and education level. Chapter 3 details the methodology that was followed in conducting the current study, including how the data was collected, description of the participants, and data analysis and coding. Chapter 4 reports the main findings of the study. Finally, chapter 5 discusses the findings of the study from a sociolinguistic perspective and offers a conclusion as well as suggestions for future research.

CHAPTER 2

Literature Review

2.1 Overview

This chapter focuses on the literature related to code-switching. It offers a brief overview of the historical aspects of Standard Arabic versus Colloquial Arabic, commencing with a definition of the term diglossia and an explanation of how Arabic is considered among the diglossic languages. The chapter next provides an overview of different models that contradict Ferguson's (1959) model, such as Badawi's (1973), in which Badawi proposed the existence of different levels of Arabic. In this way, the continuum of Arabic dialects is illustrated as a form of code-switching. Finally, the chapter reviews the relevant literature related to the roles that gender and education play in language variation.

2.2 Studies on Arabic Diglossia

According to Zughoul (1980), the term diglossia was first used by the German

linguist Karl Krumbacher (1902) and subsequently by the French linguist William Marçais (1930). Ferguson (1959) is considered the first linguist to popularize the term Diglossia to distinguish between H and L varieties in Arabic. It is important to note that Ferguson's definition specifically requires that the High and Low varieties should belong to the same language (in this case, H and L Aabic). Arabic is described by Ferguson (1959) as a diglossic language as it has two distinct codes which show clear functional separation: one

code is employed in one set of circumstances, which is a high variety (H), and the other in an entirely different set, which is a low variety (L) variety. He sets specific functions for each variety which implies that these two varieties are not used together in the same context. In his seminal article, Ferguson (1959) discussion of diglossia with regard to the relationship between Standard Arabic and colloquial varieties of Arabic was both wide and comprehensive. Taking diglossia to mean the use of two or more varieties of the same language under different conditions, Ferguson explained the phenomenon of diglossia by reference to four prototypical situations in Arabic, Modern Greek, Swiss German and Haitian Creole. He defined it as follows:

> *Diglossia is a relatively stable language situation in which, in addition to the*
> *primary dialects of the language (which may include a standard or regional*
> *standards), there is a very divergent, highly codified (often grammatically*
> *more complex) superposed variety, the vehicle of a large and respected body*
> *of written literature, either of an earlier period or in another speech*
> *community, which is learned largely by formal education and is used for most*
> *written and formal spoken purposes but is not used by any sector of the*
> *community for ordinary conversation. (p. 245)*

With respect to features, the specialization of function is significant, as H is appropriate only in some situations while L is appropriate in others. For instance, H is considered the medium of formal education, the language of all Arab constitutions, and the symbol of Arab cultural and national unity. It is used in the following situations: sermons in church or mosque, the

Qur'an, Old and New Testaments of Christian Arabs, lectures, literature including pre-Islamic era, formal education, newspapers, news broadcasts, news bulletins, street signs, official formal occasions, and so on. In contrast, L is used for daily life conversation with family and friends, in informal situations at home, work, and social gatherings. It is also used in radio and TV entertainment programs, advertisements and in recent decades in folk literature, especially in poetry, novels and drama.

Ferguson (1959) noted that H is considered prestigious, conveying the strong feeling that H is considered the "real" language while L is stigmatized or even reported "not to exist." In this sense, the attitude toward H is more positive than toward L. As an example, Ferguson observed that native speakers of Arabic who describe someone as not knowing Arabic would normally mean that that person does not know H (even if they are fluent in L). Ferguson (1959) also noted that if a non-native asks an educated Arab to teach them how to speak Arabic, they will typically be taught H. In other words, it is commonly believed that H is more beautiful, more logical, and better able to express significant thoughts and ideas.

Another point raised by Ferguson (1959) related to how both H and L are acquired. He pointed out that adults use L in speaking to children, and children use L in speaking to one another. As a result, L is acquired first while H is acquired through formal education rather than natively. H is also characterized by a strong tradition of grammatical study that allows variations only within certain limits, as well as an inflectional system of nouns and verbs that is much reduced or absent in L. Additionally, H includes grammatical categories that are not found in L.

In a later article on diglossia, Ferguson (1991) listed seven points that he called

"original weaknesses" and said that if he were to write the original article again, he would treat these differently. One important original weakness is what he called "linguistic distance" that is, the failure to clarify the distance between H and L, or how far apart H and L must be to constitute diglossia. He emphasized the need to develop scales of distance in language structure, language use, and language attitudes. Nonetheless, Ferguson himself in his original article (1959, p. 240) mentioned that diglossia is not stable and tend to develop into a more stable language situation. Diglossia resists such development for several centuries at least and in some cases as evidence shows can last well over a thousand years. According to Ferguson, the communicative tensions that coexist with diglossia might be resolved through the use of intermediate and uncodified forms of the language, which he called *Ɂl-luɣah Ɂl-wustˤa*: 'Middle Arabic'. This intended intermediate form is a kind of spoken Arabic and is utilized in semi-informal or cross dialectal situations. It has comprised intensively classical vocabulary but without or with few inflectional endings. It also includes some certain classical syntactic features but are integrated with colloquial base in morphology and syntax as well as an ample admixture of L vocabulary.

Elaborating on what Ferguson (1991) called "linguistic distance," scholars such as Blanc (1960), Badawi (1973), Meiseles (1980), and Boussofara- Omar (2006) proposed an intermediate level to describe more accurately the distance between H and L in Arabic. They observed that native speakers of Arabic in their spoken language tend to alternate between H and L, resulting in levels that are neither fully H nor L. It noteworthy that native speakers of Arabic are intuitively able to realize what forms belong to H, and what forms belong to L as Parkinson (1996) posited that "speakers themselves are very aware of the 'source' of their linguistic material, and can tell you if a particular lexical item, grammatical pattern, or even

vowel marker, is dialectal or *fusˤħaː*" (p. 91). This intermediate level is known as a continuum of varieties. Albirini (2015) distinguishes between two approaches adopted by those proposing intermediate varieties between H and L. The first of these approaches identifies distinct varieties between H and L, as exemplified by Badawi (1973), and Meiseles (1980). Badawi proposed a continuum of varieties, with varying degrees of overlap and borrowing from H and L. He identified and explained five levels of contemporary Arabic: (1) *fusˤħaː t-turaːθ* "inherited Classical Arabic"; (2) *fusˤħaː l-ʕasˤr* "modern Classical Arabic"; (3) *ʕaːmmiyyat ʔal-muθaqqafiːn* "colloquial of the educated," (4) *ʕaːmmiyyat ʔal-mutanawwiriːn* "colloquial of the literate"; and (5) *ʕaːmmiyyat ʔal-ʔummiyyiːn* "colloquial of the illiterate." Prior to Badawi (1973), Blanc (1960) proposed five levels, standard classical, modified classical, semi-literary, koineized colloquial, and plain colloquial. On the other hand, Meiseles (1980) identified four distinct varieties of contemporary Arabic: literary or standard Arabic, oral literary Arabic, educated spoken Arabic, and plain vernacular. In contrast, some researchers such as Meiseles (1980), and Ryding (1991) emphasized an intermediate variety known as Educated Spoken Arabic (ESA) or Formal Spoken Arabic (FSA) or Middle Arabic (MA). Meiseles (1980) defined ESA as follows:

> *It is the current informal language used among educated Arabs, fulfilling in general their daily language needs. It is also the main means of Arabic interdialectal communication, one of its most important trends being its intercomprehensibility among speakers of different vernaculars, arising*

mainly from the speaker's incentive to share a common language with his

interlocutor or interlocutors. (p. 126)

Ryding stated that ESA has become the language of choice for most spoken Arabic training at the Foreign Service Institute (FSI) because it represents a real segment of the continuum of spoken Arabic variants. She defined ESA as "a supra-regional prestige form of spoken Arabic practical as a means of communication throughout the Arabic-speaking world" (p. 212). Furthermore, Ryding (1991, p. 216) listed a number of distinctions that characterize ESA, or what she called the "middle language," as compared to literary Arabic:

1. Omission of inflection (i.e., final short vowels in all parts of speech);

2. Consequent metathesis of vowels on pronoun suffixes;

3. Reduction of inflectional endings in dual and masculine plural sounds to the oblique or non-nominative form;

4. Elimination of the separate feminine plural categories in verbs and pronouns and reduction to one non-gender-specific plural;

5. Elimination of the dual category in verbs and pronouns (both second and third person) and merging of this category with the plural;

6. Omission of final "nuun" in inflectional suffixes for second person feminine singular and second and third person plural in the imperfect;

7. Generalization of the defective suffixable stem to geminate verbs in the past tense;

8. Conversion of final nunation in indefinite defective nouns to a long vowel;

9. Creation of a category of verbs with embedded indirect object.

According to Mahmoud (1986, pp. 245-246), there are some factors have consolidated and contributed to the emergence of ESA, which Badawi (1973) called it *ʕa:mmiyyat ʔal-muθaqqafi:n*, such as the massive spread of education, beside the widespread use of technology, which has given birth to a new elite with distinctive communicative needs. This elite is a social class who completed their college education, however, they did not use standard Arabic for one of two reasons; either because of lack of competence and they did not master it or they think that it is not modernized enough to satisfy their way of speaking, particularly when discussing technological topics. Another crucial factor led to the emergence of ESA is its intensive use by political leaders such as Gamal Abdel-Nasser. Political leaders like the elite utilize H when attempting to convey serious issues and new concepts such as emancipation, progress, and economic freedom. In contrast, they switch to L variety in order to convey their message in a reliable, authentic, and sometimes emotional way. The influence of media is also a significant factor which led to the emergence of ESA particularly television and radio since they used to be the only way to disseminate news and information in the Arab world as well as they have become the main means of communication between political leaders and their nations. Consequently, ESA had spread among nations of the Arab world. Lastly, an important factor that has contributed to the emergence of ESA is the inter-Arab worker migration in addition to the bilateral and multilateral meetings. As a result of such dialectal contact, ESA has satisfied communicative needs and has been used as an effective as well as versatile way of communication among Arabs from different countries and region.

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2.2.1 Language and prestige

Ibrahim (1986) stated that the question of a distinction between prestige and standard

varieties of Arabic has not yet even arisen because Arabic sociolinguistics are commonly

discussed in exactly the same terms as typically non-diglossic European languages such as

English or French. He claimed that the problems of interpreting Arabic sociolinguistic data

and findings arise from the identification of H as both standard and prestigious at the same

time. Western researchers assume that the standardized variety of a language is the most

overtly prestigious, but Arabic sociolinguists need to maintain a clear distinction between

standard and the prestigious variety. Ibrahim (1986) argued against assuming that the

standard H variety of Arabic is the only highly valued or prestigious variety, as there is

evidence from various sources and from different Arab communities that spoken Arabic (L)

has its own local prestigious varieties, determined by geographical, political, and social

factors within each community. As examples of local prestigious varieties of spoken Arabic

(L), Cairene in Egypt is the prestige variety of Egyptian Arabic for non-Cairenes, and

Damascene dialect is usually considered the prestige dialect in Syria. Ibrahim noted that all

the available data show that, in speaking Arabic, Arab women employ locally prestigious

features of L more than men, and more Arab women than men would opt to use prestigious

L varieties. Similarly, Haeri (2000) found that women use standard forms significantly less

frequently than men, instead favoring non-classical, urban forms (e.g., Amman, Cairo).

Abd-El-Jawad (1987) agreed with Ibrahim (1986) that most studies of Arabic

sociolinguistics seem to equate the terms prestige and standard, and therefore tend to view

SA as the only prestige variety across all settings. Abd-El-Jawad categorized spoken Arabic

into at least three levels of prestige: (1) the national standard variety (MSA) with pan-Arab

prestige; (2) regional standard spoken varieties with local prestige (that is, competing with SA); and (3) vernacular varieties with less prestige than (1) and (2). He also noted that the influence of SA's prestige could be overridden by the social function of prestigious nonstandard local features. Abd-El-Jawad (1987) concluded by suggesting that:

> *...speakers often abandon their vernacular forms in favor of other local prestigious features in order to (a) share or "koinesize" with those of other dominant groups, an act of integration and a desire for upward social mobility, (b) avoid ridicule and the stigma of being stereotypes, (c) associate with the dominant social groups, (d) feel socially secure.* (p. 366)

Albirini (2016, p. 38) stated that the socioeconomic and educational gap between urban settlers and Bedouins in most Arab countries means that the Bedouin dialect is considered less prestigious than the urban dialect. Nevertheless, Bedouin varieties are described having *ʔasˤaːlah* "pure origin," and some urban speakers adopt features from the Bedouin dialect. For instance, Al-Wer (2007) found that some urban men in Jordan sometimes adopt features of the Jordanian Bedouin dialect to affirm their connection to Bedouin heritage and traditions. Ultimately, the prestigious variety is governed by complex historical, socioeconomic, pragmatic, and demographic factors, as well as by attitudes toward these varieties or their speakers (see also Albirini 2016, p. 39).

2.2.2 Mother tongue, native language, or second language

Ferguson (1959) drew a distinction between H and L in terms of how they are acquired. He asserted that H is learned through formal education, while the L variety is acquired at home. Although Ferguson did not attempt to identify which of the two varieties is considered the mother tongue, others construed this status is attributable to L, as it is acquired informally at home, while H is learned through formal education. For example, Schiffman (1997) stated that

> *In diglossia, no one speaks the H variety as a mother tongue, only the L*
> *variety. In the standard with dialects situation, some speakers speak H as a*
> *mother tongue, while others speak L varieties as a mother tongue and*
> *acquire H as a second system.* (p. 207)

However, Fishman (1967) and Gumperz (1993) expanded and broadened the concept of diglossia to subsume bilingual or multilingual societies. Nonetheless, Hudson (1980) objected to such expanding of the concept of diglossia as "a regrettable development, as it would seem to make every society diglossic, including even English-speaking England" (p. 55).

In attempting to link Ferguson's (1959) and Fishman's (1967) work on diglossia, Hudson (1991) stated that

> *Both studies portray diglossic repertoires as repertoires in which one variety, or*
> *range of varieties, is acquired in the natural manner of a vernacular mother tongue,*
> *whereas a second variety, or range of varieties, is acquired later in the process of*

socialization, under the influence of formal educational processes outside the
environment of home and family. (p. 8)

However, some researchers refute this point of view, arguing that H is considered the
mother tongue simply because most Arab children are exposed to both varieties (H and L)
from birth. They are exposed to H through television, radio, religious speeches and sermons
on Fridays, children's books, adults' prayers, and Qur'anic recitations, and some children
may attend religious schools in early life. Sabir and Safi (2008) cited evidence of diglossic
code-switching between H or Modern Standard Arabic (MSA) and L or Hejazi dialect (HjD)
in the speech of a 5:6-year-old Ḥijāzī child. The child had no formal schooling at that time
and had not therefore learned H formally. Examining the child's oral output over a period of
nine months, the researchers found significant elements of SA in the child's daily
conversational output, indicating that the acquisition of SA does not necessarily depend on
formal education.

Albirini (2016) conducted a pilot study to explore Arab children's comprehension of
five videos in SA, extracted from five cartoon shows: *Sinbad*, *Sasuki, ḥikāyāt alʿālamiyya*,
Sinān, and *ʾabṭāl almalāʿib*. The sample of eight children varied in age between 5 and 5:6
and came from different cities in Jordan (Amman, Irbid, and Al-Ramtha). None of the
participants had had any formal education in SA. After watching each video clip, each child
was asked three comprehension questions—one testing their general understanding
concerning the theme of the video, and two about specific details. The researcher found that
all of the eight participants were able to recognize the general idea or theme of the videos
either completely or in part (92.5% accuracy of comprehension). Most of the children

(83.1%) were also able to identify specific details requiring profound understanding of SA, demonstrating that these Arab children had receptive skills in SA. Similarly, illiterate Arabs who had not attended formal education have been found to understand SA in news reports, religious speeches and sermons, and other sources of SA, again supporting the idea that H is acquired natively.

2.3 Studies on Code-Switching

Ferguson's (1959) article about diglossia had a significant impact on early researchers of CS such as Blom and Gumperz (1972) because diglossia is similar, if not identical, to what Bloom and Gumperz (1972) refer to as situational CS (Belazi 1991, Albirini 2010). Although diglossia is a historical turning point, it can be subsumed under the umbrella of CS because switching might occur between different varieties of the same language as well as between two distinct languages. Accordingly, the current study agrees with Mejdell (2006, as cited in Bassiouney 2009, p. 31) who suggested that code-switching should be comprehended and studied in a broad context to comprise both varieties of one language and different languages. Further, CS can be studied in the written form similarly to how spoken language is studied. Thus, the term code-switching can be applied to switching between two distinct languages or switching between varieties of the same language.

As for the approaches to study CS, Appel and Muysken (1987) identified three approaches to code-switching: the psycholinguistic approach, the linguistic or grammatical constraints that restrict code choice within sentences, and the sociolinguistic approach to code-switching, which is the one mainly guiding the present study (pp. 121–122). The sociolinguistic approach attempts to provide an explanation for why speakers alternate

between different languages and codes. Among the researchers who followed the sociolinguistic approach to identify the motivations behind the factors that impact code-switching were Blom and Gumperz (1972), Gumperz (1982), Bentahila (1983), Appel and Muysken (1987), Myers-Scotton (1993b), and Bhatt and Bolonyai (2011).

Gumperz (1982) defined code-switching as "the juxtaposition within the same speech exchange of passages of speech belonging to two different grammatical systems or subsystems" (p. 59). Ten years earlier, Blom and Gumperz (1972) examined CS between standard and non-standard dialects in a Norwegian town and distinguished between two types of code-switching: situational and metaphorical. They explained that situational code-switching occurs when the conversational situation changes, for instance, when there is a change in participants, topic, or setting. In contrast, metaphorical code-switching is used as a conversational strategy to support conversational acts, such as showing solidarity with a group, offering an apology, or making a request, refusal, or complaint.

Another categorization of types of CS based on the linguistic approach is proposed by Muysken (2000, 2013 p. 714) who categorized the different types of CS into three main types: "(1) INSERTION: use of the L1, i.e., the grammatical and lexical properties of the first language, as the matrix or base language; (2) CONGRUENT LEXICALIZATION: production of structures and words which share properties of L1 and L2; (3) ALTERNATION: use of universal combinatory principles, procedures by which fragments from different languages can be combined independently of the grammars involved. (4) BACKFLAGGING: use as much as possible of the L2, i.e. the grammatical and lexical properties of the second language, as the matrix or base language."

Focusing on the social motivations for CS, Gumperz (1982) identified six functions for code-switching that clarify why people usually switch codes: (1) to introduce quotations; (2) to specify the addressee as the recipient of the message; (3) to provide reiterations; (4) to add interjections; (5) to qualify a message; and (6) to differentiate between what is personal and what is general. Notably, Gumperz (1982) distinguished between in-group and out-group audience, and proposed what he called 'we code' and 'they code' as he wrote:

> *The tendency is for the ethnically specific, minority language to be regarded*
> *as the 'we code' and become associated with in-group and informal activities,*
> *and for the majority language to serve as the 'they code' associated with the*
> *more formal, stiffer and less personal out-group relations.* (p. 66)

In addition to Gumperz identifying six functions for why individuals tend to code switch, Grosjean (1982, p. 152) distinguished ten reasons for CS, namely (1) to fill a linguistic need for lexical item , set phrase, discourse marker, or sentence filler; (2) to continue the last language used (triggering); (3) to quote someone; (4) to specify addressee; (5) to qualify message: amplify or emphasize ("topper" in argument); (6) to specify speaker involvement (personalize message); (7) to mark and emphasize group identity (solidarity); (8) to convey confidentiality, anger, annoyance; (9) to exclude someone from conversation; and (10) to change role of speaker: raise status, add authority, show expertise. Yet another researcher, Romaine (1995, pp. 161-162), identified functions for code-switching with some overlap with Grosjean (1982). Romaine identified the following functions: (1) to function as a

sentence filler; (2) to clarify or emphasize a point; (3) to shift to a new topic; (4) to mark the type of discourse; and (5) to specify a social arena.

Myers-Scotton (1993, p. 47) states that prior to Blom and Gumperz (1972), CS was perceived as a lack of linguistic competence or, in other words, it is caused by imperfect bilingualism because the person who switches between codes cannot maintain a conversation in a determined code in different situations. Moreover, Weinreich (1953, p. 73) stated that speakers consider their environment as well as the occasion of the speech when deciding whether to switch between codes. He gave an example of a university lecture as a situation in which the audience expects the lecturer to utilize a formal code when the lecturer discusses non-personal topics. In contrast, if the lecturer himself/herself talks to a student about personal matters outside of the lecture hall, the lecturer might utilize informal code. Thus, switching between codes, according to Weinreich, depends on two factors: the topic being discussed and the participants.

Auer (1988, 1995, 1998) advocated a sequential approach to CS based on conversation analysis. He argued that CS is best analysed and explained as a contextualisation cue. He stated, "[A]ny theory of conversational [code-switching] is bound to fail if it does not take into account that the meaning [of code-switching] depends in an essential way on its 'sequential environment'" (Auer, 1995, p. 116). Auer's sequential approach emphasised analysing data by considering the preceding and subsequent utterances. Auer (1995, pp. 125-126) identified four patterns for sequential code-switching: (1) discourse-related code-switching, which is used to mark a shift in topic, a change in participant constellation, or a change in activity type; (2) participant-related code-switching, which reveals the speaker's preferences for one code instead of another. For example, when

a speaker might avoid using a specific code in which he/she lacks confidence, and therefore uses the code in which he/she has greater competence; (3) semi-discourse related and semi-participant discourse-related code-switching, in which bilingual speakers keep code choices open by switching between the two codes within a turn; as a result, it becomes difficult to decide which code is the base language; and (4) transfer, in which "a word or another structure in language B is inserted into a language A frame" (Auer, 1995, p. 126).

Appel and Muysken (1987) proposed a functional model of CS to answer the question why speakers switch between codes and identified six functions of CS: (1) the referential function, (2) the directive and integrative function, (3) the expressive function, (4) the phatic function, (5) the metalinguistic function, and (6) the poetic function (pp. 118–120). The referential function of CS occurs due to lack of facility or lack of knowledge of one of the two languages on a certain topic or subject. Appel and Muysken added that this type of CS is the only type that bilingual people use consciously. Codeswitching can also serve a directive function, in which the CS can be utilized to include or exclude specific interlocutors by using the speakers' preferred code to include a speaker or the less preferred code to exclude a certain conversational participant. The directive and integrative function resembles what Gumperz (1982) called "addressee specification," as well as the convergence and divergence of the speech accommodation theory introduced by Giles, Taylor and Bourhis (1973) as cited in Appel and Muysken (1987). The expressive function, in which CS may be meaningless or carry no specific meaning, mainly serves to express the multilingual or bilingual status of the speaker. As for the phatic function, CS is used to alter the tone of conversation, and is similar to what Gumperz called metaphorical CS. The metalinguistic function occurs when the speaker aims to either directly or indirectly

comment on the languages involved. As an example of this function, Appel and Muysken (1987) described a speaker who switches between different codes to impress the audience with his/her linguistic skills (p. 120). Lastly, the poetic function involves using puns, telling jokes, and producing poetry in various languages. Furthermore, Appel and Muysken (1987) pointed out that the functions of CS vary from one community of speakers to another. For example, "Puerto Ricans in New York may code switch for very different reasons than the Flemish in Brussels" (p. 120). They also emphasized the importance of focusing on why people switch in the same manner sociolinguists focus on who does the switching.

In spite of the work that has been done by Gumperz and others on the social motivations for CS by identifying lists of social motivations for CS, Gumperz among others have not established a solid or coherent theoretical framework to explain CS as a linguistic phenomenon as an alternative to Gumperz's descriptive approach (Myers-Scotton 1993, p. 63). Consequently, several attempts have been made to establish a solid theoretical framework to explain CS, such as the accommodation theory proposed by Giles, Taylor & Bourhis (1973), Giles, Coupland and Coupland (1991), the conversational model by Auer (1988, 1995, 1998), the markedness theory by Myers-Scotton (1993), and the optimality-theoretic approach suggested by Bhatt and Bolonyai (2011).

For her part, Myers-Scotton (1993), after studying Eastern African multilingual communities, introduced the markedness model (MM) in an attempt to explain the social motivations behind CS. She observed that multilingual communities of speakers feature norms that lead the speaker to select one particular linguistic code over another. Myers-Scotton framed her MM based on the idea that people employ CS to negotiate the rights and obligations (RO) between interlocutors in social interactions. Thus, code choice in MM is

ruled and governed by the rights and obligations that are set up by the norms of the communities of speakers. Because every conversational setting differs in terms of its rights and obligations, the speakers ought to conform their behavior appropriately to achieve maximum benefit.

Myers-Scotton proposed three maxims, or types, of code-switching: the unmarked choice maxim, the marked choice maxim, and the exploratory choice maxim. Unmarked choices occur when the speakers follow the social norms. These language choices are expected and customary. The marked choice, on the other hand, deviates from the determined social norms. According to the MM, the speaker can purposely utilize a marked code rather than an unmarked code in order to negotiate a new set of rights and obligations. Moreover, the unmarked choice is used to "make your code choice the unmarked index of the unmarked [rights and obligations] RO set in talk exchanges when you wish to establish or affirm that RO set" (1993, p. 114). The unmarked choice maxim features two types of unmarked CS: sequential CS and CS itself as an unmarked choice. Sequential CS resembles the situational CS of Blom and Gumperz (1972) and occurs when the situation, topic, or participants change. Sequential CS occurs as a result of a change in conversational situation that dictates CS. The marked CS choice occurs when it is used to "make a marked code choice which is not the unmarked index of the unmarked RO set in the interaction when you wish to establish a new RO set as unmarked for the current exchange" (Myers-Scotton, 1993, p. 131). As a marked choice, CS can be utilized to increase or decrease the social distance between interlocutors, and, as mentioned, can be compared to what Gumperz (1982) referred to as metaphorical CS. Finally, an exploratory CS choice occurs "when an unmarked choice is not clear, [speakers] use CS to make alternate exploratory choices as

candidates for an unmarked choice and thereby as an index of an RO set which you favor" (Myers-Scotton, 1993, p. 142). Exploratory CS occurs when, for example, the interlocutors cannot clearly identify the unmarked choice.

In later research, the markedness model was recast into a more explicit rational choice model (Myers-Scotton & Bolonyai, 2001). The authors pointed out that the rational choice model provides a better explanation for why a speaker prefers one linguistic variety over another. In the rational choice model, the theory proposed that choices in conversations depend on the estimation and assessment of what choice provides the speaker with the greatest benefit. "That is, choices reflect a goal to enhance interpersonal relations and/or material or psychological rewards, and to minimize costs" (Myers-Scotton & Bolonyai, 2001, p. 6). The rational choice model includes three filters through which the choices pass. In the words of the authors:

> *Choices in a rationally based model of linguistic variation pass through several filters. They begin with the external constraints on speakers: their linguistic repertoires, which in turn are constrained by large-scale societal factors and the discourse structure of their communities. They are also filtered to internal constraints, the innately available architectures (a markedness evaluator, somatic markers) that bias choices based on experience. Finally, choices pass through a third filter in which a social mechanism, rationality, is the centerpiece. To act rationally means that speakers take account of their own beliefs, values, and goals, and that they assess these in regard to internal consistency and available evidence.* (p. 22)

Prior to the work of Myers-Scotton and Bolonyai (2001), Giles, Taylor, and Bourhis (1973) developed a model of code choice that they named the interpersonal speech accommodation theory. The aim behind this sociolinguistic theory was to explain that situational factors alone cannot adequately illustrate code choice. Thus, they formulated their model to focus on one taxonomic level: the aspects of interpersonal relations that have to be considered. The essence of the model was derived from social psychological research on similarity-attraction. Their model proposed that interlocutors can reduce dissimilarities between them by inducing other conversation participants to evaluate them more favorably. In other words, speakers will spontaneously or subconsciously adjust to and conform with each other to gain social approval. Such behavior is called accommodation, and it has two opposite dimensions. The first dimension, convergence, involves a speaker using the code that the other conversation participant best knows or prefers to indicate social inclusion. Divergence, the second dimension, involves the speaker attempting to use the hearer's disfavored language or code to indicate social exclusion by maximizing differences in languages usage. In support of this theory, Myers-Scotton (1988) claimed that "In many multilingual societies, switching to a language not known by all participants is a common means of exclusion, often conscious" (p. 174).

Bhatt and Bolonyai (2011) introduced the optimality-theoretic model, in which they developed a theoretical framework that incorporates principles of optimality theory (OT). Bhatt and Bolonyai benefited from previous theoretical approaches that had attempted to explain the functions of CS, such as the social-functional models (Gumperz, 1982; Heller, 1992; Myers-Scotton, 1993) and the conversational models of CS (Auer, 1998). Bhatt and

Bolonyai (2011) provide a model in which the functions of CS have been reduced to five meta-constraints, rather than consisting of countless functions of CS. Their model was generated as a result of an analysis of the sociolinguistic functions of code-switching (CS) in 120 studies that they reviewed. Bhatt and Bolonyai (2011) abstracted more than 130 functions of CS from 120 studies into five main principles:

1- The Principle of Interpretive Faithfulness (FAITH), in which "actors code-switch to the language that more faithfully and economically captures the intended conceptual, semantic-pragmatic, often socio-culturally or ideologically grounded, meaning" (Bhatt and Bolonyai 2011, p. 526)

2- The Principle of Symbolic Domination (POWER), in which social actors shift to another code to maximize social distance, and to highlight himself/herself in a position of power, status, authority, and social distance (Bhatt and Bolonyai 2011, p. 528)

3- The Principle of Social Concurrence (SOLIDARITY), in which social actors switch to another code to minimize social distance, and to create the feeling of affiliation, intimacy, and to create solidarity with others (Bhatt and Bolonyai 2011, p. 530)

4- The Principle of Face Management (FACE), in which social actors switch to the code that allows them to maintain "face," or a specific public image when interacting with others. Social actors in the principle of FACE management also "switch to a language that is best positioned to manage their interpersonal relations consistent with their own or others need (e.g. appreciation, tact,

deference, respect, positive or negative politeness)" (Bhatt and Bolonyai 2011, pp. 531-532)

5- The Principle of Perspective Taking (PERSPECTIVE), in which "Actors switch to a language that is best positioned to signal what is assumed to be currently salient point of view and socio-cognitive orientation in discourse" (Bhatt and Bolonyai 2011, pp. 531-533).

2.4 CS Studies in the Arabic Context

Having looked at some of the work that has been done on CS, this literature review focuses specifically on the work that has been done on social motivations for CS in the Arabic context. When it comes to discussing CS in the Arabic context, Bentahila is considered a pioneer in the field. In his study, Bentahila (1983) investigated the motivation behind the use of code-switching among Arabic-French bilinguals who use Moroccan dialect, claiming that code-switching is a common feature of the speech of those Moroccans who are fluent in both French and Arabic. His data comprised seven-and-a-half hours of conversations that were recorded without the knowledge of the participants. All the participants were balanced bilinguals aged between 17 and 40. The conversations took place in a relaxed home setting, involved between two and four participants meeting on a friendly basis, and covered a wide range of topics from idle chat about food, the weather, and everyday events to more serious discussions of work, politics, and education. He found that switching can allow bilinguals to use the vocabulary that they find most readily available or most appropriate to a particular topic, thereby making possible greater fluency than if they had to search for suitable terms

from within only one of their two languages. He also found that in making language choices participants may prefer words with particular connotations or avoid choosing words that might carry an embarrassing meaning in some contexts such as using *la toilette* "the toilet." In addition, he pointed out that code-switching can serve to emphasize a point, add variety, or heighten a contrast; moreover, the speaker may use it in an attempt to gain the floor or to change the topic of discourse. Code-switching might also be used as a strategy that is adopted when the speaker cannot find the appropriate words. Moreover, speakers can make a second attempt in their other language if they find it difficult to express themselves in one language. Bentahila's study shows that bilinguals do not arbitrarily or meaninglessly switch codes. The strategies bilinguals employ and the effects that these strategies create suggest that code-switching is an important part of their communicative competence.

In a similar manner, Belazi (1991) investigated CS between Tunisian Arabic (TA) and French from a sociolinguistic and syntactic angle. He collected data based on a collection of 20 recordings, about one hour each, consisting of informal conversations among educated bilingual Tunisians in a relaxed social setting. Belazi's findings do not differ significantly from Bentahila's (1983) findings. In other words, Belazi (1991) found that speakers utilized French when they discussed technical topics, and TA for less technical topics. He found that "elements of discourse which express detached, logical, intellectual and rational observations and conclusions are generally made in French, while TA serves as a filler, providing examples and details which support whatever statement or argument is being made by the speaker" (Belazi 1991, p. 167). He explained that this finding is predictable because Tunisians are trained to study science in French. Therefore, Tunisians switch to French when the context demands rationalization; even when discussing serious

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issues such as religious matters or morality in general, French is the appropriate code. In contrast, Arabic is utilized to support the main idea that is being discussed by providing examples, explanations, or stories from real-life experiences. He also found that French is used to talk about taboo subjects. Belazi pointed out that Tunisians' attitudes toward French and Arabic dominate their usage of French or Arabic, and they use French in education, modernity, economy, science, and other serious topics, whereas Arabic is utilized for religious, conservative, and national purposes.

In a similar study, Safi (1992) studied the functions of code-switching between English and the Saudi dialect of Arabic in the United States. She collected data via a recording of a two-hour meeting of eight Saudi undergraduate and graduate students aged between 19 and 33. All the participants were studying at an academic institution in the U.S. Their proficiency in English varied, and in addition they spoke different Saudi dialects of Arabic. Safi's study demonstrates that Saudi dialect is used to show politeness and emphasis, e.g., *law samaħt* "if you please," whereas English is used for cursing, e.g., "shut up and listen." Arabic appears in phrases that convey religious and national feelings, e.g., they had a beautiful *mibxara* "incense burner" and they used a big piece of *θawbi-l-kaʕba* "(black) dress of *kaʿba*" for decoration; here, the use of words such as *mibxara* "incense burner" and *θawbi-l-kaʕba* "(black) dress of kaʕba" is more compatible with feelings of religious and national belonging. By contrast, English is used to convey more serious, business-like attitudes appropriate to the topic under discussion. Safi also found that participants, as Gumperz posited, often use Saudi dialect as sentence fillers, including *jaʕni:* "it means" and *zayn* "good," as well as English fillers such as "OK.."

Saeed (1997) investigated the pragmatics of code-switching between the SA *fusˤħa:* and the L variety, or dialectal Arabic. Specifically, he examined the Egyptian, Kuwaiti, and Yemeni dialects. He focused on studying code-switching from SA to DA in religious discourse, which is the most formal context and type of discourse. His study aimed to examine the frequency of occurrence of code-switching in religious discourse and what communicative purpose these instances of code-switching served. He collected data from 18 audio and video recordings featuring 13 Arabic clerks and preachers from Egypt, Kuwait, and Yemen. He found that code-switching from SA to DA occurs in formal, religious discourse with considerable frequency. Moreover, these switches served pragmatic purposes. He also found that the frequency of CS increased during question/answer sessions more often than during the lectures.

Saeed (1997) found that CS can be divided into three categories: (1) iconic/rhetorical, which is motivated by rhetorical factors and by the speaker's attitude during reiterating, exemplifying, quoting, using sarcasm and jokes, and simplifying; (2) structural switches, which are motivated by linguistic structure, such as difficulty of structure and foreign words; and (3) other, which is motivated by various factors, such as side talk. Finally, Saeed detected a correlation between the attitude of the speaker and the content of the message, as when the speaker used SA when speaking about what he perceived as positive and agreeable. In contrast, the speaker used DA when discussing what he perceived as negative or something on which he did not agree (pp. 111–112). Thus, SA was utilized to upgrade, and DA was utilized to downgrade, or in other words, SA was used to portray content in a positive light, while DA was used to portray content in a negative light.

Similarly, Al-Enazi (2002) explored the syntactic constraints and social functions of CS between Arabic and English among Saudi bilinguals in the US. He collected his data, which consists of thirty hours of audio tape, from fifteen children and ten male adults, who had lived three to seven years in the United States. The age range of the children was between 6 and 13, and the age range of the adults was between 25 and 37. He found that English is the dominant language among children, while Saudi Arabic is the dominant language among adults. He also found that English is commonly used for academic purposes and terms such as "dissertation," and "presentation." It is also used for dates, numbers, clarification, and disagreement. In contrast, Arabic was used for religious expressions, making a confirmation, and swearing or taking an oath.

Abu-Melhim (1991) also examined code-switching and linguistic accommodation in Arabic, focusing on the functions and motivations for code-switching between H variety and L variety. His study aimed to determine whether speakers of Arabic dialects rely primarily on Standard Arabic when talking with each other in informal conversational situations (as has been widely claimed). He also aimed to investigate other strategies of accommodation used in addition to these varieties of Arabic. He collected data based on five different conversations between a Jordanian couple and an Egyptian couple. Each conversation lasted for 30 minutes, and the conversations were tape recorded. The participants were graduate students and had known each other for a number of years. Abu-Melhim found that the participants employed certain accommodation strategies when they conversed with each other. The most common strategy of accommodation was switching from Jordanian to Egyptian dialect. He claims that this switching to Egyptian is due to the fact that the Jordanians are more familiar with the Egyptian dialect than the Egyptians are with the

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Jordanian dialect because the Egyptian dialect is more predominant throughout the Arab world. It gained this dominance mainly because it is used in the media, e.g., movies, television, and music. Another strategy involved code-switching to English either completely or partially in order to clarify or emphasize a statement. Another common method was to switch from their local dialects to standard Arabic. The purpose was to emphasize a statement or when quoting. Since the participants did not use Classical Arabic during their taped conversations, Abu-Melhim claims that educated Arabs from different countries generally do not use Classical Arabic in informal conversational settings. However, the study's findings have two main limitations. First, switching to Egyptian dialect might have occurred as a result of different reasons since the study neither provided sufficient details about the participants nor about the place in which the conversations were recorded and data was collected. In other words, the participants might have lived in Egypt, and therefore, unlike the Egyptian participants, the Jordanians are more familiar with Egyptian dialect. Second, because of the small number of participants, it is difficult to generalize the findings based on the study of only four participants and to consider the four participants as representatives of millions of Egyptian and Jordanian citizens.

Hussein (1999) investigated university students' attitudes toward code-switching, discussing when and why they code-switch and examining the most frequent English expressions that students use in Arabic discourse. The study consisted of a three-section questionnaire that was developed and distributed to students. The participants consisted of 352 students enrolled during the second semester of 1996–1997 in different colleges affiliated with Yarmouk University in Jordan. This study shows that students code-switched to English for several reasons, the most important of which is the lack of Arabic equivalents

of English terms or expressions. Additionally, code-switching was found to be due to the high frequency of many English expressions which vary in range and scope in the speech of educated speakers of Arabic.

Bassiouney (2006) studied the syntactic constraints and the social functions of CS between Modern Standard Arabic and Egyptian Colloquial Arabic. She collected data from four political speeches, four sermons given in mosques, and one university lecture. With regard to the social motivations for code-switching, Bassiouney pointed out that the speaker himself/herself is the one who selects the code and decides which code is most appropriate for a given conversation. Thus, her findings contradicted Ferguson (1959) and Bell (1984). Ferguson had claimed that the situation and the topic were the influential factors in diglossic communities, whereas Bell (1984) had stated that neither the context nor the topic was the most influential factor governing the preference of a specific code because the audience controls both the speaker and the context. Bassiouney also found that Modern Standard Arabic was more frequently used to state abstract facts, while the Egyptian dialect was used to explain abstract facts, often accompanied by personalized, concrete examples. In mosque sermons, as an example, the preacher began with a verse from the Holy Qur'an in Classic Arabic, switched to the Egyptian dialect to explain the verse, and concluded in MSA to summarize his explanation. Thus, Bassiouney (2006) concluded that speakers tended to use SA to demonstrate importance and show seriousness, whereas the Egyptian dialect was often used to give concrete examples and to narrate.

Soliman (2008) also studied switching between SA and Egyptian Arabic in religious discourse. He collected data from ten recordings of religious speeches presented by an Egyptian preacher who is considered among the most famous preachers in Egypt, and well-

known for his extensive use of Egyptian Arabic. Soliman examined the phonological, syntactic, and morphological aspects of code-switching between SA and Egyptian Arabic in addition to the possibility of association between the frequency of CS and the audience— that is, whether frequency of switches was influenced by the audience being Egyptian or non-Egyptian. His study also aimed to investigate, via interviews and a questionnaire, educated Egyptians' attitude toward using the L variety in religious discourse and how they perceived it. The results of Soliman's (2008) study demonstrated that Egyptian Arabic was used in religious discourse with considerable frequency. He pointed out that SA was used to recite verses from the Holy Qur'an, to narrate Prophetic narrations, to quote, and to supplicate. In all other instances, Amr Khaled used Egyptian Arabic. In regard to the role of the audience in switching between codes, Soliman found no correlation related to whether the audience was Egyptian or non-Egyptian. Rather, he suggested that the topic of the speech was more crucial to the switching decision, unlike Bassiouney (2006), who claimed that the speaker is the most important factor in deciding when CS occurs. As for the connection between the type of discourse—whether lecture or discussion—and the occurrence of code-switching, Soliman (2008) found that the frequency of switches in lectures significantly exceeded the number of switches in discussion sessions, which contradicted the findings of Saeed (1997). Finally, Soliman demonstrated that Egyptians had a positive attitude toward using Egyptian Arabic in religious discourse and perceived the L code as more practical, simple, and influential in comparison to using SA. However, Soliman's findings could be only applicable to the Egyptian society due to the increase in number of Egyptian religious scholars, sheikhs and preachers who switch to Egyptian Arabic in their speech including formal speech (political and religious) (Soliman 2008, p.

106). Thus, Egyptian society as a case study might not represent a typical case of religious discourse. Consequently, the need for studying other communities of speakers of Arabic has become increasingly apparent.

A more recent study is Albirini (2011) which investigated the sociolinguistic functions of code-switching between Standard Arabic and dialectal Arabic. It is notable that Albirini examined code-switching between standard Arabic and colloquial Arabic in monitored speech situations. The study examined code-switching patterns employed by educated speakers of the Egyptian, Gulf, and Levantine dialects of Arabic in three discourse domains: religious discussions and lectures, political debates, and soccer commentaries. The data involved 35 audio and video recordings, the duration of which ranged between 30 and 90 minutes; overall, the corpus of recorded data consisted of approximately 27 hours of discussions by educated speakers of Arabic. Albirini found that speakers create a functional division between the two varieties of the language. They designate issues of importance, complexity, and seriousness to standard Arabic, the H variety; by contrast, they associate less important, less serious, and more accessible topics with colloquial Arabic or L variety. Albirini's study shows that speakers switch to SA (preferring to use H variety) for eight main reasons: (1) to introduce formulaic expressions; (2) to highlight the importance of a segment of discourse; (3) to mark emphasis; (4) to introduce direct quotations; (5) to signal a shift in tone from comic to serious; (6) to produce rhyming stretches of discourse; (7) to take a pedantic stand; and (8) to indicate pan-Arab or Muslim identity. Albirini claims that these types of switches occur in all the three forms of discourse stated above (religious speeches, political debates, and soccer commentaries), which surely differ considerably in their level of formality. He also found that speakers switch to colloquial Arabic (or L variety) for nine

related reasons: (1) to induce parenthetical phrases and fillers; (2) to downplay a particular segment of the discourse; (3) to signal indirect quotes; (4) to simplify a preceding idea; (5) to exemplify; (6) to mark a shift in tone from serious to comic; (7) to discuss taboo or derogatory issues; (8) to introduce daily-life sayings; and (9) to scold, insult, or personally attack. As for switching to SA, these patterns appeared in all of the three forms of discourse: religious speeches, political debates, and soccer commentaries.

2.4.1 Studies of code-switching on social media and Twitter

The association between language and media is inherently interesting, particularly so in Arabic because of the diglossic nature of its communities of speakers as well as the richness of Arabic dialects and varieties. Boussofara-Omar (2006) reported that Shawqi Daif, President of the Academy of Arabic language, in his 2001 inaugural speech at the 67th conference of the Academy:

> *openly accused the media of being carelessly oblivious noting that fusˁha: is*
>
> *'the language of the peoples of the ʔummah (the nation), luɣat ʃuʕu:b ʔal-*
>
> *ʔlummah dʒami:ʕan (the language of the [Arabic] nations altogether),*
>
> *whereas the ʕa:mmiyyah is the daily language of a single people . . . the local*
>
> *language understood only by its people.' He argued that the media has*
>
> *allowed the dialects to gradually but intrusively creep into domains of use*
>
> *that are traditionally reserved for fusˁha: and eventually claims victory over*
>
> *it.* (p. 629)

To examine the usage of SA versus dialectal Arabic in media, Alshamrani (2012) investigated the types of Arabic diglossia and how they were used on three Arabic TV channels, namely, Al-Jazeera, ART, and LBC. He attempted to examine the specific variety of Arabic the target channels most often used and why. Alshamrani collected data for approximately two years from different programs, movies, serials, and songs. He found that diglossia was used by the target TV stations, both the H variety and the L variety. Each variety was used depending on the context of each channel, type of program, and the target audience of each program. Alshamrani's study revealed that, overall, 83% of the channels used the H variety across the seven programs from which data was collected. On the other hand, the guests' or audience's usage of the H variety was 76% across the same seven programs. Thus, the average usage of the H variety between the channels and guests/audience was 80%. In terms of comparison of language use among the channels, the ART station used the L variety more intensively, i.e., the broadcasters used the H variety 23% of the time, while the guests/audience used it 10% of the time, resulting in an average of 17%. The data further showed that LBC's broadcasters used the H variety 22% of the time, and the guests/audience used it 7% of the time, resulting in an average of 15%. Alshamrani pointed out that the H variety was most often used for news, religious discourse, political programs, historical programs or movies, and literary Arabic songs, in addition to issues related to Al-Qaeda messages and terrorists. On the other hand, the L variety was often used in serials, movies, and songs.

In a similar study, Alatawi (2015) examined the syntactic structures, socio-pragmatic motivations, and psycholinguistic motivations for code-switching (e.g., trigger-words and lexical transfer) between Arabic and English in Arabic TV programs. He investigated the

relationships between code choice, the TV station, which is MBC targeted audience, and the type or content of the program. He also explored Saudis' attitude toward use of CS in Arabic TV shows. Alatawi selected four types of programs that varied in terms of their formality/informality, topic, and target audience, namely: *nabdˤ ʔal-kalaːm* "Pulse of Speech," which is a religious program; Style, which is a fashion program; *ʔat-tuffaːħ ʔal-ʔaxdˤar* "Green Apple," which is a medical program; and Arabs Got Talent, which is an entertainment program. The findings showed that CS occurred in three of the programs, but not in the religious program. As for the socio-pragmatic motivations of CS, Alatawi found that use of CS was motivated by semantic accuracy, repeating for clarification, accommodation, showing bilingualism and modernity, and connecting with the West. He also found that 76% of Saudis who responded to a survey (n = 215) did not care for CS in religious programs, whereas 72% appreciated it in medical programs, which suggests that Saudis have different attitudes toward CS based on the type/content of programming.

Recent decades have witnessed the dramatic development of communication technologies, and new modes of both audio and visual communication have emerged through the Internet. As defined by Herring and Androutsopoulos (2015), computer-mediated discourse (CMD) is "the communication produced when human beings interact with one another by transmitting messages via networked or mobile computers, where 'computers' are defined broadly to include any digital communication device" (p. 127). Abu Elhij'a (2012) introduced the term *ʔal-ʕaːmmiyyah ʔal-ʔilikturuːniyyah* "Electronic Dialectal," as in her words:

the tendency to write electronically in colloquial language has naturally had

a particularly strong effect in diglossic situations, such as Arabic, where the

very wide gap between the spoken dialects and the traditional written

language has meant that writing the spoken language often necessitates

essentially inventing a new writing system, to which I will be referring here

as Electronic Amiyya (EA). (p. 69)

Thus, computer-mediated discourse has attracted the attention of linguists in terms of the connection between the language used in online communication and the mode of communication, that is, whether such language is written, spoken, or a hybrid of both. Al-Tamimi and Gorgis (2007) examined a newly emerged code used in electronic communication, namely Romanised Jordanian Arabic. By analysing 1098 e-mail messages written by 257 Jordanian college students, and 1400 chat turns between nicknamed senders, in addition to eight A4 pages of conversations between seven participants, Al-Tamimi and Gorgis posited that this new style of e-message language could be considered to be a hybrid lingua franca or a pidgin. They also found that the majority of the college students used a casual language style in their written messages that resembled their spoken language. The chat senders were found to use English and Romanised Jordanian Arabic extensively in their e-messages.

Alabdulqader et al. (2013) examined the usage of computer-mediated communication (CMC) in the text messages of 61 male and female Saudi participants ranging in age from 14 to 24 years old. They found that the participants used Modern Standard Arabic, a local dialect, and Romanized Arabic, or so-called Arabizi. They further

found that the L variety, or the local dialect, was utilized when writing informal and casual messages, whereas MSA was used to write or exchange religious quotations and supplications. Arabizi was used less often than the local dialect or MSA and was more likely to be used by male students.

Code-switching also takes place in social media. Eldin (2014) conducted a sociolinguistic study of code-switching among Arabic language speakers in social networks. His study attempted to examine the concept and functions of code-switching in electronic contexts as used by Arabic-English bilingual university students in their Facebook interactions. The study showed that participants switched codes for several reasons, such as showing solidarity with a social group, distinguishing themselves, participating in social encounters, discussing certain topics, expressing feelings and affections, and impressing and persuading the audience. Eldin (following Malik 1994) outlines 10 reasons for code-switching: (1) lack of facility; (2) lack of registral competence; (3) mood of the speaker; (4) amplifying and emphasizing a point; (5) habitual expressions; (6) semantic significance; (7) showing identity with a group; (8) addressing a different audience; (9) pragmatic reasons; and (10) attracting attention.

Alfaifi (2013) investigated CS between Arabic and English among bilingual Saudis in relation to 10 topics of Facebook interactions, including gossip, humor, technology, compliments and thanking, achievement, movies and songs, family and intimacy, makeup, travelling, and religion. From a syntactic perspective, her major focus was on the use of intrasentential CS on Facebook. She collected her data from 10 Saudi females who were Arabic-English bilingual and the data consisted of 1000 screenshots of Facebook comments. Alfaifi found that the occurrence of intrasentential CS was frequently higher in informal

interaction. Furthermore, she found that gossip and humor topics, in particular, had the lion's share of intrasentential CS in comparison to the other topics. Similar to Safi (1992) and (Al-Enazi, 2002), Alfaifi's study showed that English words that were used within Arabic sentences were indeed technical words and academic terminology, whereas, Arabic words that were used in within English sentences were for religious expressions. She concluded that the utilization of intrasentential CS among Saudi female on Facebook has become an explicit characteristic of interactions. It is also noteworthy that the recurrence with which they utilize CS is identified with the subject of their communication, the language condition and environment, cultural experiences, and religion.

Kosoff (2014) examined code-switching in Egypt on Twitter. She observed that Egyptian Twitter users utilized combinations of Modern Standard Arabic (MSA), Egyptian Colloquial Arabic (ECA), English, Arabizi, Modern Standard Arabic, and Arabizi Egyptian Colloquial Arabic. Her data consisted of about two hundred tweets from ten Twitter users (Rania's Corner, First Mall, Prime Magazine, Cairo Gossip, otlob.com, and Wel3a Café, Hamza Namira, El Sawy Culturewheel, Amr Hamzawy, and Mahmoud Salem). The ten Twitter users' interests and backgrounds fell within five categories: food services, music artists and venues, political figures and activists, fashion and shopping, and social agendas and entertainment guides. The results of the study showed that Twitter user's tweets can reflect the socioeconomic and educational background of the Twitter user's target audience. For instance, some business accounts such as Rania's Corner, First Mall, Prime Magazine, Cairo Gossip, Otlob.com, and Wel3a Cafe often tweet in English in order to target wealthy and highly educated populations. Code-switching between English and Arabizi ECA is used secondarily to target the same demographic. In contrast, Hamza Namira instead used mostly

ECA and a combination of MSA and ECA to target mainly young Egyptians interested in alternative music and culture. El Sawy Culture wheel tweets mainly in MSA and secondarily in English in order to reach Egyptians and members of the expatriate community who support music and the arts. With respect to political figures and activists, a politician Amr Hamzawy tweets in MSA in order to reach out to political supporters. Another Twitter user who does not appear to follow a particular trend was Mahmoud Salem. He used a combination of MSA, ECA, English, Arabizi MSA, and Arabizi ECA. He combined these varieties in order to reach Egyptians who are well educated and also have deep ties to their Egyptian and Arab identities.

Albirini (2016) conducted a case study to explore the distribution and functions of SA, DA, and English on social media. In addition, he aimed to investigate the sociolinguistic functions of SA and DA on social media, particularly on Facebook, due to its multipurpose uses. His case study attempted to answer two main questions: what are the social functions of SA, DA, and English in comments posted on Facebook? and how do these functions compare to the functions identified in offline interactions? Albirini collected data from comments posted on a Facebook page entitled Syrian Revolution. This Facebook page had approximately 900,000 subscribers (which could increase or decrease from day to day) from different ethnicities, linguistic, religious, social, and political backgrounds. Albirini collected 2,993 comments from this page on a randomly chosen day: Friday, January 31, 2014. The selected comments varied in length from a single word up to 875 words. Next, the comments were filtered to exclude those that had been re-posted several times, leaving a total of 2,108 after filtering, which included 33,816 words. He found that SA was used in the comments to (1) highlight the importance of a segment of discourse, (2) introduce direct

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speech, (3) produce a rhyming stretch of discourse, (4) theorize or preach, and (5) index a personal identity. On the other hand, he found that the L variety or DA was used to (1) make sarcastic or offensive remarks, (2) introduce common sayings, and (3) scold or insult.

Albirini also found three main motivations behind using English: (1) some Facebook posters lacked functional knowledge of Arabic, (2) English appeared to be easier and more convenient for them, and (3) English was used to convey a global message to an international audience. Based on his analysis, Albirini (2016, p. 291) pointed out an interesting finding as he found some of the overlapping functions of SA and colloquial Arabic (QA). He found that some functions that are correlated with SA (e.g., formulaic expressions) or are associated with QA (e.g., joking) are expressed in both, SA and QA in online interactions.

2.4.2 Language use and social variables: gender and education factors

In classic variations studies of Arabic, the most common speakers' social variations which have been considered are age, gender, and level of education (Al-Wer 2009). The current study considered the gender and the level of education as social variables, and it did not consider the age because it is difficult to know the ages of the selected Twitter accounts' users. The correlation between social variables, particularly education level, gender, and linguistics have been discussed by variationists guided by Labov's work, such as Abdel-Jawad, (1981, 1987), Abu-Haidar (1989), Al-Ahdal (1989), Al-Jehani (1985), Al-Shehri (1993), Al-Wer (1991), Haeri (1991, 2000), Sadiqi (2008), Schmidt (1974) and Walters (1989, 1991, & 1996), among others.

As for education as a social variable, in some cases, a person's level of education is used as an indication of social class (Albirini, 2016). While Ferguson (1959) mentioned that the L code is acquired natively and the H variety is learned through formal education, as described above, the findings of Sabir and Safi (2008) contradicted this claim as they found that the acquisition of SA does not necessarily depend on formal education. In addition, it has been observed that students in Saudi Arabia, for example, do not take language classes to learn Standard Arabic. What has been noticed is that, from their first day in school, students are able to communicate in SA because they are exposed to SA at home through children's educational programs and in mosques, especially during Friday sermons. Therefore, "one can hear children before school use phrases in Modern Standard Arabic, imitating cartoons or other children's TV programs" (Alshamrani, 2012, p. 59).

Different opinions regarding the role of education in language usage are, however, common. Badawi's (1973) model apparently emphasized the role of education in identifying the five levels as the gap between the first level, which is *fusˤħa: t-tura:θ* "inherited Classical Arabic," and the fifth level, which is *ʕa:mmiyyat ʔal-ʔummiyyi:n* "colloquial of the illiterate" as a result of the distinction between levels of education. A contradictory view was introduced by Al-Wer (2009) who posited that higher levels of education lead to a language change away from the standard language, and higher education level is also associated with language innovation and less conservative linguistic behavior, "hence, what 'education' does not do is to promote the language associated with education" (p. 633). Al-Wer justified the correlation between language change and high level of education in terms of social contact within the social networks of students with higher levels of education. It is common in the Arab world that university students, in many cases, move to another city, leaving their

hometowns, families, and communities of speakers. Such movement results in expansion of social contacts and speech communities. Thus, exposure to different social variables, dialects, varieties, and attitudes most likely will lead to a language change.

In contrast to Al-Wer (2009), Walters (1996) attempted to explain the likely ramifications of universal education and the widespread knowledge of Classical Arabic (CA)/ Modern Standard Arabic (MSA), as education contributed to a significant force for social linguistic change. Due to the spread of education in countries in the Arab world, Arab societies have changed dramatically, as education has provided Arab societies with access to CA/MSA and the tradition of restricted literacy has ended as a result. Walters (2006, p. 166) pointed out that the use of CA/MSA can index an identity correlated with formal education, and that mastering CA/MSA and speaking it extemporaneously indicates specific training and life experience as well as a commitment to political, religious, and social beliefs that Arabs should maintain CA/MSA. Consequently, using a specific code could be indicative of negotiating a new set of rights and obligations [RO], as in Myers-Scotton's (1993) markedness model of code choice, as it is related to variety choice in diglossie societies. Walters provided the Tunisian case as an example of the role of education in linguistic change. He pointed out that the National Ministry of Education placed newly minted secondary teachers in the rural, poorer, and less-developed areas of Tunis for at least the first two years of their practice. Taking into consideration that these teachers had spent time in a major urban city while studying at college, placing them in rural areas allowed them to have contact with secondary schools students across the republic in face-to-face interactions. This process, according to Walters, led to what he termed 'Elevated Tunisian Arabic.'

To explore the role of gender and education on code choice, Schmidt (1974) had previously studied the linguistic variation in spoken Egyptian Arabic quantitatively from a sociolinguistic perspective, and investigated some phonological, lexical, and grammatical variables. Schmidt (1974, p. 17) pointed out that his descriptions were found to be compatible with Badawi's (1973) descriptions in terms of the different levels of varieties and styles. Schmidt collected his data via 28 structured interviews that were conducted in Cairo. The 28 informants were selected from the American University of Cairo, in addition to another local working class from Al-Sayyida Zaynab (SZ) neighbourhood in Cairo. The informants consisted of 16 university students (half male and half female) from the American University in Cairo, and the rest of the informants were 12 males with secondary education or less of comparable age who were considered to be working class. Schmidt found that men maintained the prestige variant /q/ rather than the colloquial variant /ʔ/ more frequently than did women in both formal and casual styles. In addition, he found that men who were less educated or uneducated in the working class district produced the standard variant /q/ more frequently than women participants from the American University of Cairo did. He also found that Egyptians produced /s/,/z/, /zˤ/ or /t/,/d/, /dˤ/ rather than the interdentals /θ/, /ð/, and /ðˤ/, respectively, and that Egyptians with high levels of education maintained the standard variants /θ/, /ð/, and /ðˤ/ more often than those who were uneducated or who were workers with a low level of education. Moreover, in the same group of educated informants, men were found to maintain the standard variations /θ/, /ð/, and /ðˤ/ more often than their female counterparts did. Thus, his findings corresponded with Badawi (1973), and were later supported by Abd-El-Jawad (1981, 1987), in that, in the Middle East, men maintained the standard variants more often than women with the same

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level of education, and that speakers of Arabic with high levels of education maintained the standard variants more often than speakers with no or little education did.

With respect to gender as a social variable, studies by Labov (1972) and Trudgill (1974) found that women tend to be more conservative than men and prefer to use more standard language and prestigious forms. Ibrahim (1986), however, observed that women do not enjoy prestigious varieties of language in their communities of speakers as much as men. Instead, women rely on the standardized language varieties. Ibrahim attributed this sociolinguistic paradox to women's universally inferior social position. In other words, it has been suggested that women's linguistic behavior reflects their inferior social status, which makes them feel socially and psychologically less secure than men. However, the issue is not as simple as this generalization proposes. Eckert (1989) observed that

> *there is a general misconception among writers who do not deal directly with variation that women's speech is more conservative than men's. Indeed, women do tend to be more conservative than men in their use of those vernacular forms that represent stable social variables. On the other hand, the very earliest evidence on variation (Gauchat, 1905) showed women leading in sound change, a finding that has been repeated in Labov's work in New York City (1966) and Philadelphia (1984), in Cedergren's work in Panama (1973), and in my own work in the Detroit suburbs.* (pp. 247–248)

Labov (1982) claims that in the Near East and South Asia, women are not necessarily more conservative than men. However, some studies in the Arab world such as Ibrahim (1986),

and Abd-El-Jawad (1981, 1987) claim that Labov might not have considered the difference between a prestige variety and a standard one. They found that in some urban areas, there is a prestige vernacular which differs from the Standard Arabic. For instance, in Egypt, Cairene is the prestigious variety for non-Cairenes. Therefore, Abd-El-Jawad (1981, p. 351) stated that "men are more sensitive to what we called "National Prestige" while women are more sensitive to local prestige." Haeri (1996a) states that "studies of gender differentiation have shown that women who have equal levels of education to men use features of Classical Arabic significantly less than men" (p. 307). In contrast, Abu-Haidar (1989) found that women tend to use Standard Arabic features more frequently than men based on her data that was collected from fifty Iraqi women and men in Baghdad.

Al-Essa (2009) studied the social variables of age and gender in terms of dialectal contact-induced change between the Najdī and Ḥijāzī dialects. She examined language variation within the Najdī community of speakers who had moved to Ḥijāz, investigating, in particular, their affrication of [k] and [g], which they articulated in the Najdī dialect as [ts] and [dz], respectively. Al-Essa collected data from interviews with 61 Najdī males and females, some born in Ḥijāz and others having immigrated to Ḥijāz at a young age. She found that older Najdī women maintained the Najdī variations more than men. She attributed her findings to gender segregation in Saudi society as well as lack of access to the dominant spoken variety in Ḥijāz, which is, of course, the Ḥijāzi dialect, due to social interaction restrictions. That is, in a traditional society such as the Najdī, social interactions between the genders are restricted outside of the family sphere. In contrast, Al-Essa discovered that younger female participants used the Ḥijāzī velar stop [k] rather than the Najdī affricate [ts] more than men did. She justified this difference with her assertion that

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the younger generation within the Najdī community of speakers had stronger contact with the Ḥijāzī dialect.

For his part, Al-Rojaie (2013) investigated the effect of the linguistic and social factors of age, gender, and level of education on the patterns of variation in the affrication of [ts] for [k]. His data, which totals approximately 56 hours of recorded speech, was collected from the informal speech of 72 speakers of Qasˁiːmiː, a local dialect of Najdī Arabic in central Saudi Arabia. He found a strong correlation between using the [ts] variant and the age, educational level, and gender of the speaker. Furthermore, older uneducated speakers, regardless of their gender, tended to maintain the use of the local variant [ts]. In contrast, younger and middle-aged educated speakers, particularly women, favored the use of the supralocal variant [k] as it is used in SA.

Ismail (2015) examined the CS performance of young Saudi couples during mixed-gender dinner gatherings. The data was collected from the speech of six married Saudi couples that often met for dinner in each other's homes. All participants were university graduates. The data consisted of approximately 89 minutes of recorded speech of participants which was recorded during two dinner gatherings. The age range of the participants was between twenty-eight and thirty-seven. The analysis of the recorded conversations showed a total of 756 instances of CS; about two-thirds (64%) of CS was between single-sex conversations, and about a third (36%) was during mixed-sex conversations. This was possibly because of women and men still preferred to group next to each other and maintain a physical distance between them in the same space in spite of the fact that participants broke away from Saudi cultural traditions of gender segregation and socialized in mixed-sex environments. This study showed that women overall code-switched

more than men as well as they resorted to mor e single-noun and single-adjective switches than men. Ismail's study showed that there is no significant gender differences in intersentential and intrasentential switching for this group of bilingual Saudi speakers neither in single nor in mixed-sex interactions. Interestingly, this study revealed that CS performance appears to be constrained by Saudi culture, which encourages interaction between the different genders to be in a formal level. Thus, both women and men, in mixed-sex interactions, preferred not accommodating to the previous interlocutor switch to English, which might exhibit a degree of social distance and formality between the interlocutor and the person of the opposite gender.

Albirini (2016) summarized some of the common generalizations that are found in the literature related to gender and language as follows:

Among several common generalizations, four stand out (Cheshire, 2002; Labov, 1972; Tagliamonte, 2011; Trudgill, 1986; Wolfram & Fasold, 1974):

- *compared to men, women are more attentive to socially evaluative linguistic forms because they are often under greater social scrutiny.*

- *Women are more likely to use linguistic forms that reflect social class because they have historically been deprived from access to high-ranking positions.*

- *Women tend to converge on overtly prestigious varieties or features regardless of whether these are represented by standard, national, supralocal, or local varieties.*

- *Compared to women, men are more likely to opt for stigmatized varieties and features that are associated with covert prestige as these also often mark masculinity.* (pp. 194–195)

However, the overall scarcity of Arabic studies on the role of gender and education indicate that it is crucial to enrich the literature on CS and social variables such as gender, education, age and social class, among other factors, by conducting further research. It is also important to expand the studies to encompass more Arabic countries and speech communities independently in order to provide descriptive accounts of Arabic more precisely and to show how it is used by different communities of speakers of Arabic.

2.5 Conclusion

In summary, this chapter presented the literature related to code-switching. It provided a brief overview of the historical aspects of Standard Arabic versus Colloquial Arabic, commencing with a definition of the term diglossia that was introduced by Ferguson (1959) and an explanation of how Arabic is considered among diglossic languages. A counter approach then proposed an intermediate level to describe the distance between H and L in Arabic more accurately (Badawi, 1973; Blanc, 1960; Meiseles, 1980).

The chapter then reviewed the relevant literature related to CS, beginning with a brief description of some popular models of CS such as the conversational model by Gumperz (1982), and Auer (1988, 1995, 1998), the accommodation theory proposed by Giles (1973, 1987), the markedness theory formulated by Myers-Scotton (1993), and the optimality-theoretic approach suggested by Bhatt and Bolonyai (2011). It then reviewed some studies that focused on CS in the Arabic context such as Bentahila (1983), Belazi

(1991), Safi (1992), Saeed (1997), Bassiouney (2006), and Albirini (2010, 2011). It also reviewed some studies that investigated Arabic language use in the media, such as the works by Alshomrani (2012) and Alatawi (2015), and in social media, such as the studies by Al-Tamimi and Gorgis (2007), Alabdulqader et al. (2013), Eldin (2014), Alfaifi (2013), Albirini (2016) and Palfreyman and al Khalil (2003). Lastly, this chapter concluded by presenting relevant studies that explored the roles that gender and education play in language variation, such as works by Al-Wer (2009), Abdel-Jawad (1981, 1987), Haeri (1991, 2000), Walters (1989, 1996), Schmidt (1974), Labov (1972), Ibrahim (1986) and Eckert (1989), among others. Two distinct views were presented with regard to gender, the first being that of Labov (1972) and Trudgill (1974), who stated that women tended to use standard variations more often than men did. By contrast, Ibrahim (1986), Abd-El-Jawad (1981, 1987) and Schmidt (1974) found that, in the Middle East, men used the standard variations more often than women did, even if they were equal in terms of education (Badawi, 1973; Haeri, 1996a; Schmidt, 1974). In this regard, Walters (1996) argued that the spread of formal education contributed to granting speakers of Arabic access to CA/MSA; accordingly, it ended the tradition of restricted literacy. Al-Wer (2009), on the other hand, argued that higher levels of education led to a language change away from the standard language.

CHAPTER 3

Research Methodology

3.1 Overview

As discussed in the literature review, Ferguson's (1959) seminal article has focused on

diglossia, however, he has introduced what Bloom and Gumperz (1972) later refer to as

situational code switching (CS) as Gumperz says "in diglossia, code alternation is largely of

the situational type (Bloom & Gumperz 1972)" Gumperz (1982, p. 60). Speakers switch

between two varieties, which are H variety and L variety, in diglossic communities

according to the context and the situations of the discourse. However, due to the fact that

switching occurs between different varieties of the same language as well as between two

distinct languages, apparently diglossia also can be investigated within the framework of

CS. Therefore, the current study used the term Code-Switching rather than the term diglossic

switching to refer to the switching between SA and DA as Mejdell (2006, as cited in

Bassiouney 2009, p. 31) points out that CS "should be understood in a broad context to

encompass both varieties and different languages."

The current study aimed at investigating the social functions of CS between SA and

DA among Saudis on Twitter. It aimed to answer the following research questions:

1. What are the functions of using CS on Saudi Twitter? Are these functions different from the functions of CS in face-to-face interactions?

2. Do patterns of the use of CS differ by gender and education?

3. Do patterns of the use of CS differ by topic?

3.2 Framework

As shown in the above literature review, researchers have focused primarily on investigating bilingual oral CS or face-to-face interaction and the functions of such switches. The current study aimed to contribute to the phenomenon of bidialectal CS by investigating its functions via a different channel, namely, written rather than oral or face-to-face interaction. The current study also aimed to examine whether the patterns of CS differ by topic and occasion, as well as how gender and education could influence the pattern of CS.

Researchers examining oral CS have listed a wide variety of functions of CS. For instance, Bhatt and Bolonyai (2011) abstracted more than 130 functions of CS from 120 studies into five main principles: FACE, POWER, SOLIDARITY, FACE, and PERSPECTIVE. The frequently identified functions include: quotation; repetition; interjection; addressee specification; emphasis; clarification; elaboration; focus; attention, attraction, or retention; a sentence filler; showing power solidarity and social status; redefining a situation due to a change in participants, topic, or locale; personalization versus objectivization; and topic shift and role shift. Table 3.1 lists the most frequent and common functions of CS identified by Gumperz (1982), Bentahila (1983), Romaine (1995), and Albirini (2010, 2011).

Table 3.1 The Most Frequent and Common Social Motivations for CS.

Gumperz (1982)	1. to introduce quotations 2. to specify the addressee as the recipient of the message 3. to provide reiterations 4. to add interjections 5. to qualify a message 6. to differentiate between what is personal and what is general, 'Personalization vs Objectivization'
Romaine (1995)	1. to function as a sentence filler 2. to clarify or emphasize a point 3. to shift to a new topic 4. to mark the type of discourse 5. to specify a social arena
Bentahila (1983)	1. to emphasize a point 2. to add variety or heighten a contrast 3. to gain the floor 4. to change the topic of discourse 5. to introduce a quotation 6. to be used as a strategy adopted when the speaker gets lost for words.
Albirini (2010, 2011) why speakers of Arabic switch to SA:	1. to introduce formulaic expressions 2. to highlight the importance of a segment of discourse 3. to mark emphasis 4. to introduce direct quotations 5. to signal a shift in tone from comic to serious 6. to produce rhyming stretches of discourse 7. to take a pedantic stand 8. to indicate pan-Arab or Muslim identity.

Albirini (2010, 2011) why speakers of Arabic switch to DA:	1. to induce parenthetical phrases and fillers
	2. to downplay a particular segment of the discourse
	3. to signal indirect quotes
	4. to simplify a preceding idea
	5. to exemplify
	6. to mark a shift in tone from serious to comic
	7. to discuss taboo or derogatory issues
	8. to introduce daily-life sayings
	9. to scold, insult, or personally attack.

In addition, as Table 3.1 shows for CS between SA and DA, the findings of CS to DA show that it is utilized to convey unimportance, low-prestige, accessibility, and nonseriousness. In contrast, CS to SA is utilized to reflect the importance, high-prestige, sophisticated, and serious functions (Albirini 2010, 2011).

Because the current study focused on the social functions of code-switching/diglossic switching in Saudi Arabic speech on Twitter, it adopted the sociolinguistic approach to explore the functions of CS in Saudi Arabic on Twitter focusing on religious, social, educational, athletic, and political topics. These topics vary in terms of the formality and informality range characterized by Ferguson (1959). In addition, Ferguson's (1959) context-based model was adopted here in the current study because Saudi dialectal and standards use seems to conform to Ferguson's context-based model, or more aptly what Hudson (2002, p. 6) reframes it as a model whose main constraint is "situational context." Thus, religious and educational topics are discussed in SA or H variety, whereas athletic or sports topics are informal and therefore discussed in DA or L variety. Social and political topics might vary in terms of formality and informality depending on the context or

occasion (i.e., whether the topic is serious or not). For this reason, if CS on Twitter resembles CS in face-to-face communication, we would expect to encounter the same functions such as those listed in Table 3.1 Conversely, if CS on Twitter does not resemble CS in face-to-face communication, we would expect to encounter different functions.

To investigate the code choice in the above mentioned five topics (religion, social issues, education, soccer, and politics), data from different hashtags dealing with the five topics were collected, as discussed in the Participants and Data Collection section below. In addition to adopting Ferguson's (1959) situational model, the study adopted an interpretive qualitative approach in the analysis of the functions of CS. Therefore, the methodology for the current study was based on the ethnographic approach. As such, it utilized sociolinguistic qualitative descriptive analysis to investigate the functions of CS on Twitter and to compare them to the functions found in face to face interaction as shown in Table 3.1 As the current study investigated the functions performed by written CS, the differences between written CS and functions of oral CS are predicted due to the difference in channel, namely, written versus oral or face-to-face interactions. The current study also investigated if the patterns of CS would differ by gender and education, and it examined how the patterns of CS would change by topic or occasion. Although the study design was primarily descriptive, a quantitative approach also was utilized to analyze the ratios of SA use versus DA use considering the differences in gender and level of education.

3.3 Participants and Data Collection

In order to collect the data, I employed two techniques. First, to answer the first and the second research questions, I followed data collection via selective method sampling,

whereby I collected 7350 tweets from 210 Twitter accounts with sufficient data of gender and education for the selected Twitter accounts. The Twitter users' accounts were differentiated and diversified based on gender and education. The information about the educational level of my samples was collected from their biographies on Twitter. In some cases, if the biography information was left blank but I knew the account holder personally I added his/her Twitter account to my data source. With regard to gender, this was identified via the name of the user. Users who use a nickname were excluded.

I also used https://followerwonk.com/bio as a source for Twitter accounts, and obtained the location information from the public user profiles using 'Followerwonk' website. I utilized https://followerwonk.com/bio to research participants by searching for keywords such as student, teacher, Ph.D. student, college student, professor, engineer, and the like. I have chosen this particularly useful tool because it allows me to search for Twitter users based on certain criteria, such as searching for specific keywords in users' biographies, as well as searching by the location of the user himself/herself, which is Saudi Arabia, for the current study. I utilized 'Followerwonk' to select the target participants for my study by setting Saudi Arabia as the location for my search and by entering keywords, as mentioned above, such as 'male/female student', 'male/female professor', 'male/female high school student', 'male/female college student', 'male/female teacher' …etc. to obtain diverse subjects for my study in terms of gender and level of education. Certainly, the target subjects were diversified to include participants from university and high school students, school teachers, medical doctors, engineers, officers, professors, and professionals in various fields and with different backgrounds.

I then conducted a quick examination for the selected Twitter users' accounts to select participants who satisfied the following criteria:

1. The account must be active in terms of tweeting and replying to other users

2. The account should have at least one thousand tweets, which can appear in the biography, to ensure that the user is active on Twitter

3. Accounts of users with nicknames were excluded because nicknames do not usually reveal whether the user is male or female

4. The user's biography should contain some personal information about the user, such as job, gender (which can be deduced from the user's name), level of education (for example, the title 'professor' means that the user has a Ph.D., 'teacher' means that the user has a bachelor degree[2]).

5. Users with more than 500,000 followers were excluded because such users most likely have followers from all over the globe; therefore, they usually use Standard Arabic in all their tweets. An example is @MohamadAlarefe, who is a famous Saudi clerk, and has more than 17 million followers. Consequently, all of his tweets are in Standard Arabic because his audience is global, and the use of Standard Arabic guarantees that his audience understands his tweets.

After applying the above specified criteria to the participants' selection, I obtained 210 Saudi Twitter accounts diversified based on gender and education, as Table 3.2

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[2] Normally, in Saudi Arabia, teachers who earn masters' degrees in their fields are promoted to work in the Department of Educational Supervision.

illustrates. Then, I used the 'All My Tweets' website in order to collect participants' tweets https://www.allmytweets.net/. Furthermore, the 'All My Tweets' website has two main features, which are the ability to hide retweets and replies or keep them among the tweets. I narrowed the focus of my research to the period between December 2016 and July 2017, and I chose the latest 35 tweets from each subject's tweets, which means I collected up to 7350 tweets. The extracted tweets then were exported into a Word file and were categorized according to the groups shown in Table 3.2 and classified according to gender and level of education. The total number of subjects were 210 Twitter users, categorized as shown in the following table:

Table 3.2 Categorization of the Participants.

Male with Less Than College Education	Male with College Education	Male with High Education	Female with Less Than College Education	Female with College Education	Female with High Education
35	35	35	35	35	35

The first group in Table 3.2 include males who are still in high school, graduated from high school but did not pursue their higher education, and college students or with some college education. The second group include men who hold a bachelor's degree. The third group include men with higher education such as a master's or Ph.D. degree. The fourth group include females who are still in high school, graduated from high school but did not pursue her higher education, and college students or with some college education. The fifth group

include women who hold a bachelor's degree. The sixth group include females with higher education such as a master's or Ph.D. degree.

Then, the tweets were extracted and each tweet was considered as a unit and the extracted tweets in each group were classified according to the following categories:

1. Tweets that were written entirely in Standard Arabic.

2. Tweets that were written entirely in Saudi Dialect.

3. Tweets that had CS from Standard Arabic to the Saudi Dialect. In other words, they began with SA then switching to DA occurred.

4. Tweets that had CS from the Saudi Dialect to Standard Arabic. In other words, they began with DA then switching to SA occurred.

5. Tweets that started and ended in SA, but had embedded DA elements.

6. Tweets that started and ended in DA, but had embedded SA elements.

All the extracted tweets have been filtered to exclude retweets, duplicates, tweets written in languages other than Arabic, spam, lines of poetry, quotations, proverbs and idioms, supplications, verses from the Holy Qur'an, and tweets with URLs. Then, the switches have been observed and coded in terms of whether they convey meanings either from social perspectives or from discourse points of view or not.

Second, to answer the third research question and investigate whether the patterns of CS use differ according to topic or theme, another method of collecting data has been followed. I followed a random sampling method in order to collect the data based on theme or by topic from hash-tagged tweets. I collected an additional 500 tweets from fives hashtags

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that varied in terms of topics and themes. I chose five different hashtags that were trending

in Saudi Arabia in the period between November 2016 and July 2017, which are:

1. ³#تنظيم_مكافات_الطلاب_الجدد *tanzˤiːm mukaːfaːt ʔatˤ-tˤulaːbi ʔal-dʒadiːd* "The

   new regulating of college students' stipends," which is a socio-economic

   topic concerning college students in Saudi Arabia. In Saudi Arabia,

   university students who attend a public school receive a monthly stipend

   which varies between SAR 850 and SAR1000 '$222 - $266' based on

   students' majors. This hashtag was trending in Saudi Arabia after some

   rumors have been leaked that the Saudi government is planning to make new

   regulations governing students' monthly stipends. The leaks of the new

   regulations mentioned that only students with high GPAs who maintain an

   outstanding status should exclusively receive a monthly stipend. Following

   the prediction of Ferguson (1959), this hashtag apparently would be in SA or

   H variety since it discusses a crucial and serious issue for college students.

2. #شرايك_في_الزواج_التقليدي *ʔiʃraːyik fi z-zawaːdʒi t-taqliːdiː:* "What is your

   opinion about arranged marriage?"- this is a social hashtag which discusses

   Saudi people's opinions about arranged marriages in comparison to dating or

   to marriage based on a love/romantic relationship before getting engaged or

   getting married, which is rejected by Saudi society because it violates Saudis'

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³ There is a typo and grammatical error as it should be الجديد "*al-jadīd*" rather than الجدد "*al-judud.*"
The meaning of the hashtag is also confusing because readers who are not familiar with the topic will
think this hashtag discusses the monthly stipend only for the new enrollees, whereas the adjective
"new" refers to the stipend's system rather than the new students. Thus, the hashtag should be
#التنظيم الجديد لمكافآت الطلاب to convey the intended meaning, which is "The new regulating/rules of
college students' stipends."

traditions, beliefs, and culture. Following the prediction of Ferguson (1959), I assumed this hashtag would use both H variety and L variety since it is a social issue and therefore, the used variety would depend on the user's perception toward such issue.

3. #ارامكو_بيع_يعارض_الشعب *ʔaʃ-ʃaʕb yuʕa:ridˤ bayʕ ʔara:mku:* "The nation objects to selling ARAMCO" - this is a socio-political hashtag via which Saudis express their opinions, either for or against significant issues that concern the whole of Saudi society that arose when the Saudi government announced its intention to sell 5% of its giant oil and energy company, Saudi ARAMCO. This hashtag discusses an important topic for Saudi society because they perceive ARAMCO oil company as the backbone of economy of Saudi Arabia. Following the prediction of Ferguson (1959), I assumed this hashtag would use SA or H variety to discuss such a crucial issue.

4. #تركي_بن_يافيصل_ارحل *ʔirħal ya: faysˤal bin turki:* "Oh Faisal Bin Turki, leave"- this is a sport-related hashtag. Using this hashtag, the fans of *An-Nassr*, which is one of the most famous soccer clubs in Saudi Arabia, were asking the president of the club to resign after losing the final game in the Saudi Crown Prince Cup Final to *Al-Ittihad*, which is also another famous soccer club in Saudi Arabia. Following the prediction of Ferguson (1959), this hashtag should be in the SD or L variety according to Ferguson (1959) since it is about sport's topic.

5. عام_علي_منع_الهييه#[4] *ʕa:m ʕala: manʕ ʔal-hayʔah* "A year since the suspension of the Committee for the Promotion of Virtue and the Prevention of Vice" in Saudi Arabia. It is a socio-religious hashtag discussing a very controversial issue which took place when the government of Saudi Arabia reduced the power of the Committee for the Promotion of Virtue and the Prevention of Vice, and removed some of their privileges last year. The opponents of the Committee for the Promotion of Virtue and the Prevention of Vice believe that the Saudi government has made the right decision. They claim that the Promotion of Virtue and the Prevention of Vice pries into their personal affairs and it is the gathering place and the official umbrella for fundamentalists. The proponents of the Promotion of Virtue and the Prevention of Vice, on the other hand, believe that the government made a costly and unforgivable mistake because they see the Promotion of Virtue and the Prevention of Vice as the lifeboat that saves the Saudi society from sinking in immorality. This hashtag discusses a crucial issue in Saudi society. Accordingly, following the prediction of Ferguson (1959), I assumed it would use SA to discuss such a significant issue.

The above-mentioned hashtags clearly vary in topic, formality, and informality, which is characteristic of the Arabic sociolinguistic scene (Ferguson 1959). I collected more data (500 tweets) by utilizing Tweetdeck website (https://tweetdeck.twitter.com/). One hundred

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[4] There is a spelling mistake in الهييه as it should be written as الهيئة. Such spelling mistakes are common in social media, as will be shown later to illustrate some aspects of how social media impacts Arabic.

tweets were extracted from each of five hashtags. Using the Tweetdeck website, I searched the hashtags, I went over the hashtag and selected the latest 100 tweets excluding retweets, duplicates, tweets written in languages other than Arabic, spam, advertisements, lines of poetry, quotations, proverbs and idioms, supplications, and tweets with URLs.

3.4 Data Coding and Analysis

Due to the nature of the targeted data as it is in a written form, it should be noted that written CS cannot be considered a spontaneous language production since writing involves a process of self-consciousness and awareness. Therefore, the code choice and switches are not likely to be arbitrary. I assumed that Twitter users perceive Twitter as a virtual platform in which the user has his/her own audience and followers to whom he/she tweets, therefore, the user accordingly consider the topic, and the virtual audience to use the appropriate code. It is also known that SA and DA overlap in many aspects in terms of their morphological and syntactic rules in addition to sounds and lexical items or vocabulary. Therefore, in case it is difficult to decide whether a tweet is in (H) or in (L), a control group of three judges who are educated native speakers of Arabic would be asked to rate the tweets. I relied on syntax, morphology, and lexical choice when categorizing the tweets, since I am unable to account for phonology. The following website *ʔal-baːħiθ ʔal-ʕarabiː* http://www.baheth.info/ was used in determining SA words, in case the word is not clear whether it belongs to SA or to the L code, because it incorporates the most important Arabic electronic dictionaries such as ʿ*lisaːn ʔal-ʕarab, maqaːyiːs ʔal-luɣah,*and *ʔal-qaːmuːs ʔal-muħiːtˤ* among others.

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The current study followed Eid (1988) and Albirini (2010, 2016) in determining where a switch is initiated and how to categorize ambiguous forms, which might be identical in both H and L varieties in addition to the intermediate forms which neither clearly belong to H nor clearly belong to L. Eid's (1988) and Albirini (2010, 2016) identify switches based on cases in which SA can be clearly distinguished from DA. Thus, the ambiguous cases will be excluded since generalizations and conclusions have to be made based on clear cases only. Forms or sentences that cause an ambiguity because they are shared by both H and L varieties do not provide evidences either for or against CS, therefore, such forms were disregarded. Eid (1988, p. 56) pointed out that intermediate forms are difficult to deal with, therefore, she considered the presence and absence of choices for the speaker. For instance, the verb *raʔayt* "I saw" in SA is normally produced in Egyptian dialect as *raʔēt* "I saw" with a long vowel rather than the SA diphthong. She considered such intermediate form a SA because Egyptian Arabic has another choice which is the verb *ʃuft* "I saw," which has the same meaning "I saw." Similarly, Albirini (2010, 2016) treated some lexical items such as *raːħa* "he went" as DA form because the alternative is available, which is *ðahaba* "he went." Therefore, the verb *ðahaba* "he went" belongs to H variety or SA, while the verb *raːħa* "he went" belongs to L variety or DA. Nonetheless, such form *raːħa* "he went" was treated in the current study as SA or H variety because, according to *ʔal-baːħiθ ʔal-ʕarabiː'* http://www.baheth.info/ that I utilized to determine whether a form belong to SA or not, the verb *raːħa* "he went" has been used in Classical Arabic with a similar, if not identical meaning to what it means nowadays. In contrast, some forms such as *talaːta* "three," *haːzaː* "this" in Ḥijāzī dialect and *ʃuft* "I saw" were considered DA since the alternative standard choices are available, which are *θalaːθ*, and *haːðaː*, and *raʔayt* respectively. Another

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example is the verb *kult* "did you eat?" was considered as a DA since it has an equivalent in

SA, which is *ʔakalta*? "did you eat?." The borrowed words such as *ʔaballik* "I block,"

ratwatt "I retweeted" also were considered as L variety because they have been Arabized

and therefore they have equivalents in H variety, which are *ʔaħzˤur, ʔaʕdtu t-taɣriːda* or

tadwiːr respectively.

To analyze the data, the first step was to read the extracted tweets and then coded the

units that are connected to the research questions. While formulating the codes, the topic, the

user's gender, and the user's level of education were considered. Then, recurring codes

within each group were identified and labeled into coding patterns. To maintain the privacy

of the target Twitter accounts, names and personal information were removed or covered

and do not appear to anyone except the researcher. Finally, the relationships between coding

patterns were categorized into themes and subthemes comparable to those found in the

literature.

In sum, the methodology consisted of classifying and analyzing the functions for CS

between SA and the SD on Twitter and then comparing them with the functions already

demonstrated in the literature for oral or face-to-face interactions. To answer the study's

three research questions, data has been collected from 210 Twitter user accounts and five

hashtags that vary in theme and topic. The total number of extracted tweets were 7859: 7350

tweets from the users' accounts and 500 tweets from the five hashtags. The functions of CS

have been investigated by analyzing all extracted tweets and comparing them to the

functions already identified in face-to-face communication. Then, the tweets extracted from

the users' accounts have been analyzed to investigate the pattern of CS, namely, whether

they would differ by gender and level of education or not. Finally, the extracted tweets from

the five hashtags have been analyzed to examine whether the functions of CS would differ

by topic and occasion.

CHAPTER 4

Findings

4.1 Overview

This chapter reports the study findings on the social motivations for codeswitching (CS) between Standard Arabic (SA) and the Saudi dialect (SD) on Twitter. The study aimed to answer the following research questions:

4. What are the functions of using CS on Saudi Twitter? Are these functions different from the functions of CS in face-to-face interactions?

5. Do patterns of the use of CS differ by gender and education?

6. Do patterns of the use of CS differ by topic?

In addition to answering these questions, this study contributes to our knowledge of bidialectal CS by investigating its motivations in written interactions in social media. As shown in the literature review, researchers have primarily focused on examining bilingual oral CS and face-to-face interactions and the functions of such CS.

To answer the research questions, a total of 7,350 tweets were extracted from 210 Twitter accounts of diverse users with different genders and levels of education. All of the Twitter accounts that were selected conformed to the following criteria:

1. Accounts needed to be active in terms of tweeting and replying to other users at the time of data collection, which took place between December 2016 and July 2017. As a result, some accounts were excluded because the last tweet was in 2013 or 2014. Some accounts were active, but most, if not all, of their tweets were merely retweets for supplications, verses from the Qur'an, and Prophetic narrations.

2. A given account needed to have at least one thousand tweets that appeared in the biography. This ensured that the user was active on Twitter and that there were enough tweets available, as the number of tweets that appears in the biography includes retweets.

3. The accounts needed to include real names that appeared on users' profiles rather than nicknames, as nicknames can make it difficult to determine whether the user is male or female. Moreover, the accounts needed to have clear profile pictures that confirmed users were the real owners of the accounts. Some account users use pictures of celebrities rather than pictures of themselves; such accounts were excluded from the study. In addition, each account was checked to ensure that users were involved in discussing or commenting on social, sports, religious, and/or political issues, as well as issues related to the users' fields of work or study. For example, teachers usually discuss issues related to education, while medical doctors or students usually discuss medical issues. Accordingly, if a user

described himself/herself as a teacher but did not tweet anything related to teaching or education, that account was excluded for the study. The same exclusion criterion was applied to accounts in which users claimed to be doctors, engineers, students, professors, etc.

4. The biographies on the accounts needed to contain some personal information about account user, such as job, gender, which can be deduced from the user's name, and level of education. For example, in Saudi Arabia, the title *duktuːr* "professor" means that the user has a Ph.D., the title of *muʕallim* "teacher" means that the user has a bachelor's degree, and *tˤabiːb* "a physician/medical doctor" means that the user has a bachelor's degree in medicine.

5. A given accounts needed to have less than 500,000 followers. Users with more than 500,000 followers were excluded because such users most likely have followers from different countries and different language backgrounds; therefore, these users usually use Standard Arabic in all their tweets to communicate with their followers from different countries and different language backgrounds.

After applying the abovementioned criteria for each account, the latest 35 tweets were extracted between December 2016 and July 2017; so, for some accounts the 35 extracted tweets were tweeted in June 2017, while for other accounts the 35 extracted tweets were tweeted in March 2017. The dates of the 35 extracted tweets from each account depended on the date on which I collected the tweets from each account. In other words, while collecting the data for each user, I started from the latest tweet and went back in tweets until I obtained the target number of the tweets for each user, which was 35 tweets. While collecting the tweets using "the 'all my tweets'

websites"[5], the extracted tweets were filtered to exclude retweets, duplicates, tweets written in languages other than Arabic, spam, lines of poetry, quotations[6], proverbs and idioms, supplications, verses from the Holy Qur'an, and tweets with URLs. After such filtering, a total of 7,350 tweets were obtained. The extracted tweets were then exported into a Word file, were categorized according to the groups shown in Table 3.2 in Chapter 3, and were classified according to gender and level of education. The total number of subjects were 210 Twitter users categorized into various groups (as shown in Table 3.2 in Chapter 3).

4.2 Motivations for Codeswitching to Standard Arabic

The current study found that Twitter users in Saudi Arabia switch to SA for the following reasons: 1- to introduce formulaic expressions, 2- to emphasize a point, 3- to quote, 4- to shift from comic to serious, and 5- to take a pedantic stand. Table 4.1 provides a summary of the motivations of CS to SA with their frequencies across the six groups. Almost all of the motivations that have been identified in my data exist in each group except those marked with an Ø. In the sections immediately below, these findings are discussed in detail.

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[5] https://www.allmytweets.net/

[6] When the tweet itself was merely a quote, it was excluded. However, if the tweet itself included a quote, then it was included in the data.

Table 4.1 The Social Motivations with Their Frequencies for CS to SA in Each Group.

Social Motivation for CS to SA	Men – H.E.	Women – H.E.	Men – C. E.	Women – C.E.	Men – B.C.E.	Women- B.C.E.	Total
to introduce formulaic expressions	5 (19%)	8 (20%)	8 (14%)	9 (19%)	20 (29%)	59 (66%)	109 (33%)
to emphasize a point	4 (15%)	5 (12%)	15 (25%)	13 (28%)	13 (19%)	5 (6%)	55 (17%)
to quote	3 (12%)	Ø	5 (8%)	8 (17%)	7 (10%)	11 (12%)	34 (10%)
to shift from comic to serious	6 (23%)	13 (32%)	17 (29%)	17 (36%)	17 (24%)	9 (10%)	79 (24%)
to take a pedantic stand	8 (31%)	15 (37%)	14 (24%)	Ø	13 (19%)	6 (7%)	56 (17%)

Note: Total tweets containing CS to SA = 333.
      Total tweets in SA = 4376.
      Total tweets in SD = 1851.

4.2.1 To introduce formulaic expressions

The following examples show CS to SA by inserting formulaic expressions intensively used in daily speech. Formulaic expressions in Arabic culture include many statements such as maː ʃaːʔa llaːh "what God pleases," ʔin-ʃaːʔa llaːh "if God wills," subħaːna llaːh "glory to God," and ʔal-ħamdu lilaːh "praise be to God." The following examples (Tweet 4.1) - (Tweet 4.3) illustrate the use of these expressions in reference to sport, educational, and religious topics:

Tweet 4.1

<div dir="rtl">

صحيح لعيبة الأهلي اغلبهم تعبانين ولاينفعون بريال ويلعبون بالواسطة لكن بكره ان شاء الله حاضر وبدعم فريقي وليس هم لانهم ذالفين وبيبقى النادي .

</div>

"It is true that most of Al-Ahly's players are very poor and completely worthless and just play because of their connections. But tomorrow, **if God wills**[7], I will attend the match and will support my team—not them, because they eventually will go away, while the team itself will remain."[8]

In Tweet 4.1, the Saudi Dialect (SD) is used when referring to a sport topic. The tweet disparages the team players for not working hard for the sake of their team. The Twitter user criticizes and expresses anger about the level of his favorite team's performance using the SD or the L variety. However, he employs SA or the H variety in a formulaic expression invoking a verse from the Holy Qur'an: "And never say of anything, 'Indeed, I will do that tomorrow,' except [when adding], 'If Allah wills'" (Quran 18:23–24).

---

[7] To distinguish between SA and the L code, the English gloss corresponding to SA is in bold throughout the examples.

[8] For the purpose of this study, I followed a somewhat literal translation.

Tweet 4.2

<div dir="rtl">

امنيتي اكون مع قروب وما تورطنا بنت ياخي سبحان الله الظروف ماتجي الا وقت تسليم المشروع اليوم معي ثلاث قروبات كلنا اكلنا تبن بسبب الغايبات 💔

</div>

"My wish is to be with a group and not get trapped by a girl. Oh, brother, **glory to God,** circumstances only come at the time of the project due date. Today, I am in three groups, and all of us ate hay because of absent female members."

In Tweet 4.2, a female student wishes to work in a productive group with serious members. She complains about her previous experience with other groups, particularly when some members missed group meetings, which negatively affected their work. She utilizes the SD in her tweet as she complains about a personal experience, or in other words, she uses the L variety for the purpose of personalization of the message. However, in this tweet, she inserts a formulaic expression in SA "glory to God." In this context, this exclamation conveys that she is angry with her group members and, to some extent, does not believe their excuses for not attending the group meetings and consequently failing to produce excellent work in their class projects.

Tweet 4.3

<div dir="rtl">

ودي أعرف وش اللي أعادوا النظر فيه بالضبط. وإن شاء الله أنها خطوة موفقة.

</div>

"I hope I can know what they reconsidered exactly. And **if God wills**, it is indeed a successful step."

In Tweet 4.3, the Twitter user utilizes the SD or the L variety to comment on a piece of news about rewriting and modifying the Islamic Culture curriculum at a Saudi university to be more

moderate and tolerant. She is in an in-group, so she uses the SD to convey her thoughts about the changes to the Islamic culture curriculum. Then, she code switches to SA, stating a formulaic expression "if God wills" as a supplication and a prayer of hope for success and moderation.

4.2.2 To emphasize a point

The following Tweets (Tweet 4.4) - (Tweet 4.7) show how Twitter users can switch to SA to highlight various social issues.

Tweet 4.4

<div dir="rtl">

والله لو تجيب تيار من القمر بيتطبع بطباعنا، الإقصائية هي الدم الذي يجري في عروقنا.

</div>

I swear to God: if you bring a party from the moon, it definitely will acculturate to our nature. **Exclusion is the blood flowing in our veins.**

In Tweet 4.4, the Twitter user swears to God that if a new party were brought from the moon and became a member of Saudi society, it would certainly be negatively influenced by Saudi nature and traditions. He complains about two categories in Saudi society: the left (those who call themselves liberals) and the right (who are called fundamentalists). This tweet is in reply to another Twitter user who tweets that Saudi society needs a real liberal group that believes in liberty, justice, and freedom of speech. Unfortunately, those who claim to be liberals are not really liberal but, rather, exclusionist in the same manner as the fundamentalists. The only difference between the two groups is that the liberals exclude others by accusing them of disloyalty to their country, whereas the fundamentalists suppress others in the name of the Islam. The Twitter user employs the SD to express his despair with the reality and then he code switches to SA to emphasize his point about the denial of exclusion.

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Tweet 4.5

<div dir="rtl">

إذا طاح الجمل كثرت سكاكينه،يقصد به جمل نحر على السنة ليحل أكل لحمه! لايجوز تطبيقه على مسئول نحر الأمانة والصلاح! فمن العدل أن تكثر سكاكينه!

</div>

"If the camel fell down, many knives would stab it **with the intent to slaughter it according to** *farːʕa* **'Islamic law', to make it permissible to eat its meat. It is not applicable to person who is responsible for slaughtering honesty and righteousness! It is fair to have more knives to stab him.**"

In Tweet 4.5, the writer starts his tweet with a traditional proverb in the SD or the L variety and then code switches to SA to emphasize the importance of fighting corruption in high places. He asks for showing no mercy to corrupt officials. Here, CS to SA indicates the importance of fighting corruption and purging corrupt high-ranking officials and bureaucrats without showing any mercy.

Tweet 4.6

<div dir="rtl">

ترا ملينا من سالفة ان المرأة عندنا ملكة وتُعامل كالملكة.! كليشة مملة، مبالغ فيها، لاتعكس كل الواقع ولا حتى نصفه، غير مقنعة ومدعاة للسخرية.!

</div>

"You should know that we got bored with the story that women in our society are queens and are treated like queens! [It is] a boring cliché, **exaggerated, [and] does not reflect all reality, not even half of it. It is unconvincing and ironic!**"

In Tweet 4.6, the writer criticizes the social issue of the status of women in Saudi Arabia. He argues against the statement frequently repeated by some social conservatives claiming that women in Saudi Arabia are treated as if they are queens. He rejects the idea that women are treated as queens and claims that in his society, recognition of women's rights is still lacking. He

starts his tweet by utilizing the SD or the L variety to show that he is in an in-group and to express his frustration. He then switches to SA or the H variety to highlight the importance of enabling women to regain their rights by criticizing conservatives' claims about women as both unconvincing and ironic.

Tweet 4.7

<div dir="rtl">
اللي زعلان ولامايوصل أرحامه من الحين العن الشيطان
وتصالحو ، لان الله لايقبل عمل المتخاصمين 👌 💜 💜
</div>

"Whoever is angry and does not maintain ties with his kinship, from now, curse Satan and be reconciled with each other, **because God 'Allah' does not accept [good deeds] from people who have disputes between them**."

The Twitter user in this tweet offers advice to those who were hostile to each other at the beginning of Ramadan, the month of fasting. She tweets about important social issues, namely harboring a grudge against others and having a quarrel with others. She tweets to indicate the significance of reconciliation among those who were arguing. Thus, due to the importance of reconciliation among those who were arguing, she switches to SA to emphasize the importance of purifying one's heart and reconciliation with others; otherwise, Allah "God" would not accept good deeds from those who had a quarrel with others, particularly during the time of Ramadan, the month of mercy and forgiveness from God. Therefore, she shifts to SA because of the importance of approaching others with a poor heart and good intentions.

4.2.3 To quote

The current data show that SA and the SD are both used for direct and indirect quotations. The following are Tweets (Tweet 4.8) – (Tweet 4.10) of quotations used in social contexts.

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Tweet 4.8

<div dir="rtl">

لما أحد يمر جنبي وأنا في المحكمة ويقول لي : وبيوتهن خير لهن ، اش المفترض أسوي معاه؟!
☺️

</div>

"When someone passes by me while I am in the court and says to me, "**Their [women's] homes are better for them**," what I am supposed to do with him?!""

In this tweet, the user reports a direct quotation in SA. The tweet itself utilizes the SD because the author is a female lawyer complaining about some opponents of women working in courts as lawyers. She asks sarcastically, as the emoji reveals, how she should reply to those who are ignorant or those passersby who keep saying to her "their [women's] homes are better for them." This statement invokes a verse from the Holy Qur'an instructing the wives of the Prophet Muhammad to "stay quietly in [their] houses, and make not dazzling display, like that of the former times of Ignorance" (Qur'an 33, 33) because they are not like other women. The Twitter user employs the SD to express her anger and irritation with this frequent occurrence as she complains to her close friends by seeking their advice about her situation and dilemma. The quotation is in SA because it invokes the Holy Qur'an, a holy text revered as God's revelation to His prophet Muhammad.

Tweet 4.9

<div dir="rtl">

أمس قلت في سناب أني أحب عيدي ببساطته، ومبسوط دام أخواني يروحون معي كل صباح للصلاة وأشوف أمي وأختي بخير، فردت وحدة: أنت تدعي المثالية .

</div>

"Yesterday, I said on Snapchat that I love my Eid "holiday" with its simplicity. I feel satisfied as

long as my brothers go with me every morning to pray, and I see my mother and sister all right. A woman replied, **'You are pretending to be idealistic'**."

This tweet concerns a personal matter, so the author uses the SD to tell this story to accompany some videos he publishes about the activities of himself and his family members on the Islamic holy day of Eid El-Fitr after Ramadan, the month of fasting. The L variety is typically utilized for such topics. However, a woman sends a reply in SA telling the author that she does not like his snap videos and that "you are pretending to be idealistic." In this tweet, SA is used to report a direct quotation because the tweet's author quoted her reply as she produced it. The user cod-switched to SA because he wanted to convey the exact phrase or expression used by the woman who commented on his snap videos.

Tweet 4.10

<div dir="rtl">

جازت لي :

.
إن كنت تشعر بالألم فأنت حـــي ..
و إن كنت تشعر بألم الاخرين فأنت إنســـان ..

</div>

"I like it:
If you feel pain, then you are alive. ...
And if you feel the pain of others, then you are a human. ..."

The author begins this tweet in the SD to express his admiration for this quotation. Then, he switches to SA to give this direct quotation about an important issue: empathy for others and their pains, sufferings, and hardships.

4.2.4 To shift from the comic to the serious

The current data show that shifting from a comic or non-serious topic to a serious topic is the least common motivation for CS to SA. Tweets (Tweet 4.11) – (Tweet 4.14) show how CS to SA can indicate a shift from the comic to the serious in sport and political contexts:

Tweet 4.11

يعجبني النصراوي العاقل.. حتى لو قلب وطقطق على الهلال 👍
بعيداً عن التعصب.. شكراً شرطة الرياض👏

"I like the sagacious Nasraoui. … Even if he altered and made fun of Al-Hilal
away from prejudice ... Thank [you,] Riyadh police."

This user tweets about a sport topic: the two most famous soccer teams in Riyadh, the capital of Saudi Arabia. The competition between An-Nasr and Al-Hilal is very tough, and their fans make fun of each other and get mad at each other in endless debates and arguments. The Twitter user utilizes the SD to compliment any An-Nasr fans who are sane and not narrow-minded or prejudiced against Al-Hilal, even as he criticizes and makes fun of Al-Hilal himself. He uses the SD for this sarcastic purpose and to criticize a realistic case, and then he switches to SA to reflect on a serious issue, the role of Riyadh police in controlling the fans of both teams and preventing them from attacking and hurting each other. He uses SA because this is a significant issue, to control the flow of the fans from both teams and protect them from the insane fans who might cause fights. Soccer hooliganism is considered to be a social issue and annoys and upsets most well-behaved fans and those concerned with sport issues and topics.

Tweet 4.12

حصار مقاطعه حصار مقاطعه ذبحتو انفسكم بهذه المصطلحات المكابره شينه والابواب القصيره لحل الاشكال معروف لكن أبا الشيطان الا ينفث سمومه

"A blockade, a boycott, a blockade, a boycott, you slaughtered yourselves with these terms. The stubbornness is disgraceful, [and] the short doors [shortcuts] to resolve the issue are known, **but Satan refuses [to do anything] except to spray its venom.**"

In this tweet, the user mocks Qatar regime and its attempt to demonize the countries that have ostracized it: Saudi Arabia, United Arab Emirates, Bahrain, and Egypt. She imitates the terms Qatar keeps repeating at every event: a blockade, a boycott, and so forth. She sarcastically criticizes Qatar and makes fun of how it seeks a settlement to the political crisis, although she thinks it is very easy to solve it: just give up or get rid of your arrogance and stubbornness. In her tweet, she uses the SD or the L variety because she is attacking and insulting Qatar. She then switches to SA or the H variety to discuss the role of the Devil in seducing Qatar. Here, she switches to SA because she moves to the serious issue of how Satan influences the Qatari regime.

Tweet 4.13

كانت شلة الداوفير من أكثر من عرفت تهبيقا وفلةً، لكن كان لكل شيء وقت ومقدار، واغتنام فرص الفراغ وتنظيم الوقت كان السلاح الأقوى هنا!

"The studious coterie was one of the best groups I have ever known in terms of having fun, **but everything had a limited time and amount, seizing the opportunities for free time besides time management was (were) the most powerful weapon here!**"

The Twitter user in this tweet in an educational context advised a newly enrolled student at his university, King Fahd University of Petroleum and Minerals, how to succeed during his studies and the college journey. Accordingly, he utilized the SD to describe how the studious group, with which he was affiliated, had a lot of fun, happiness, and enjoyment in spite of passing their classes with excellent grades, which is ironic. He then switched to SA to signify the seriousness of time management, as well as taking the opportunity to have free time. He also described their techniques for managing their time and for taking advantages of their free time as a "strong weapon" that enabled them to achieve success. Thus, he switched from the SD to SA in order to shift from a comic to a serious tone.

Tweet 4.14

.Oh god people
ما هي جهة رسمية لول.
هو اجتهاد من نساء عظيمات لمتابعة ومراقبة تنفيذ القرارات
بخصوص موضوع الولاية.

"Oh God people.
It [@NoMaleGuardians a Twitter account] is not an iorganization LOL.
It is an initiative of great women to follow up and monitor the implementation of decisions regarding the [male] guardianship [over women in Saudi Arabia]."

The Twitter user in this tweet was replying to a tweet. The user was essentially joking about another Twitter account, which was @NoMaleGuardians, about the account's name itself. She described the @NoMaleGuardians account as the National Anti-corruption Commission, women's section, in a joking way. The National Anti-corruption Commission was established in 2011 by a royal decree from King Abdullah Bin Abdulaziz to fight corruption in Saudi Arabia.

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The @NoMaleGuardians was created after "Saudi King Salman has issued an order, which will free women from having to obtain a consent from their male guardians in order to receive services"[9] (Saudi women no longer need male guardian consents to receive services, Al Arabiya English.net, May 2017). The account was created by a group of feminists to follow up and monitor the implementation of the decree. The user was joking about the account's name and activities and, as she emphasized that this was not an official or governmental organization; she utilized the SD and then shifted to SA to alter the tone from comic to serious.

4.2.5 To take a pedantic stance

The data show that CS to SA might be done to indicate taking a pedantic stance. In some cases, Twitter users shift to SA to assume the role of an expert or an analyst in address their audience. For them, SA is the appropriate choice because it is the language of education and prestige. The data indicate that this motivation is almost exclusively found among highly educated users, regardless of gender. This motivation could arise from the desire of the highly educated to practice the role of the expert and show social distance. Such patterns of CS occur in political and educational contexts, as shown in Tweets (Tweet 4.15) - (Tweet 4.17).

Tweet 4.15

جايز لكن الموضوع نسبي الى حد معين ويختلف من تخصص
الى آخر. فالتقنية توفر أداة لحل مشكلة، والدراسات العليا توفر
البذرة وتصقل فكرة هذه الأداة.

"Maybe, **but the subject to a certain degree is relative to some degree and varies from one**

specialty to another. Technology (as an example) provides a tool to solve a problem, and graduate studies provide seeds and refine the idea of this tool."

In this tweet, the user code switches from the SD to SA for the purpose of performing the role of an expert or, in other words, to take a pedantic stance. He replies to a follower who enquires about the interference between modern technology and higher education today and wonders whether modern technology will make higher education unnecessary because knowledge will be available at everyone's fingertips. The user creates the feeling of an in-group by using the SD to show some agreement and then code switches to SA to take a pedantic stance or the role of expert, emphasizing the need for higher education in providing students with the required tools and seeds to grow their knowledge and contribute to different fields.

Tweet 4.16

لا من كل الانواع فيه. بس قوميات العالم الثالث تشكلت في اطار تحرري من الاستعمار في الحرب الباردة وكان اليسار هو نموذج التحرر.

"No, there are all kinds. But **the third-world nationalities were formed in a liberal framework of colonialism during the Cold War, and the left was the model for liberation.**"

In this tweet, the user replies to a question about whether all nationalists are leftist and socialists or if some are right-wing and capitalists. The user initially replies in the SD for the same purpose as shown in example 14, which is to show closeness or in-group affiliation. He then code switches to SA to explain a philosophical issue. He takes a pedantic stance or the role of expert to explain how third-world nationalisms were shaped in the liberal framework of colonialism during the Cold War, when the left was the model of liberation.

Tweet 4.17

المشكلة مو بانقطاع الكهرب، لان هذا شي طارئ مو باليد

لكن مولدات ماتشتغل هذا لعله فشل بخطط الطوارئ أو اهمال بعدم الفحص والتأكد..

"Power outage is not the problem, because this is an emergency out of hand
But, generators do not work, **this could be a result of failed emergency plans or negligence in testing and [regular] checks.**"

The Twitter user in this tweet commented on the subject of a power outage in a hospital in his home city. The newspaper stated that, when the power outage occurred, the standby generators also did not work. The user then used the SD to explain that the power outage was predictable and possible. He then shifted to SA to adopt the role of an expert, an engineer, or an analyst in order to explain the possible reasons behind the failure of standby generators. He attributed the power failure to negligence on the part of the engineers and the maintenance team, particularly with regard to regular testing and checks. Thus, this CS could be included in the motivation of scolding or personal attack, but could also be considered to be motivated by taking a pedantic stance or the expert role.

4.3 Motivations for Codeswitching to the Saudi Dialect

The study found that Twitter users in Saudi Arabia switch to the SD for the following reasons: 1- for a specific intended meaning, 2- for sarcasm and criticism, 3- for quotations, 4- for exemplifying and simplification, 5- for introducing daily-life sayings, 6- for scolding and personal attack or insult, and 7- for common usage. While these motivations were common to all users, one pattern of CS was found in 5 tweets (1%) among women with less than college

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education. These women codeswitched to SD where one would expect SA to be used. These five tweets were supplications and prayers. Almost all of the motivations that have been identified in my data exist in each group except those marked with an Ø. In the section immediately below, these findings are discussed in detail.

Table 4.2 The Social Motivations with Their Frequencies for CS to the SD in Each Group.

Social Motivation for CS to SD	Men – H.E.	Women – H. E.	Men – C. E.	Women – C.E.	Men – B.C. E.	Women- B.C.E.	Total
Specific intended meaning	30 (27%)	Ø	30 (17%)	17 (15%)	31 (18%)	11 (10%)	119 (15%)
For sarcasm and criticism	15 (13%)	Ø	17 (10%)	8 (7%)	15 (9%)	7 (7%)	62 (8)
To quote	16 (14%)	14 (12%)	8 (5%)	6 (5%)	14 (8%)	Ø	58 (7%)
To explain and exemplify	15 (13%)	16 (14%)	21 (12%)	22 (20%)	30 (18%)	19 (18%)	123 (16%)
To introduce sayings about daily life	13 (12%)	7 (6%)	9 (5%)	8 (7%)	7 (4%)	8 (8%)	52 (7%)
To scold, insult, and personally attack	15 (13%)	16 (14%)	42 (24%)	14 (13%)	24 (14%)	15 (14%)	126 (16%)
For Common usage	9 (8%)	63 (54%)	49 (28%)	36 (32%)	48 (28%)	40 (38%)	245 (31%)
Overlapping	Ø	Ø	Ø	Ø	Ø	5 (5%)	5 (1%)

Note: Total tweets containing CS to SD = 790.
      Total tweets in SA = 4376.
      Total tweets in SD = 1851.

4.3.1 Specific intended meaning

The current data show that some tweets are fully written in SA but have lexical items from the SD or the L variety inserted for the sole reason of conveying a specific meaning possibly only through (CS) to the SD. More details are shown in Tweets (Tweet 4.18) - (Tweet 4.20).

Tweet 4.18

<div dir="rtl">

إياك أن تضحي بأهدافك الشخصية وأصدقائك، إياك أن تضحي بفلتك وناستك، لأنك بدون كل هذا لا تستطيع الاستمرار، فقط تحتاج التحكم بوقتك!

</div>

"Do not sacrifice your personal goals and your friends; do not sacrifice your fun and your enjoyment **because without all of these, you cannot go on; you only need to control your time!"**

Tweet 4.19

<div dir="rtl">

قد تضطر للتضحية بالجلوس مع الأشخاص الذين يعتبرون الدفرة عيبا! لا تخسرهم لكن قلل الجرعة معهم، هذا جزء صعب من التضحية!

</div>

"You might be obliged to sacrifice to sit with people who consider studious (or bookish) **a shame! Do not lose them, but reduce the dosage [of sitting] with them, this is a hard part of sacrifice!"**

In Tweets (4.18) - (4.19), the user advises a newly enrolled student at his university, King Fahd University of Petroleum and Minerals, how to succeed during the college journey. He takes on the role of the expert, so he utilizes the SA. However, he also prefers to use some lexical items that have specific pragmatic meanings in the SD, so he code switches to insert *fallitǝk*, *wana:stik*,

and *ʔad-dafrah*. The inserted lexical items include *fallitək* and *wana:stik*, which both mean having fun and joy. The user makes these lexical choices to convey a specific intended meaning possible only through code switching to the SD or the L variety. The meaning of fun and joy is available in SA, but the two words *fallitək* and *wana:stik* carry specific meanings, especially among younger generations. Similarly, in Tweet (4.19), the Twitter user inserted a single word from the SD or the L variety, which is *ʔad-dafrah* "studious or bookish." The word has a negative connotation similar to "nerd" in English. Most college students avoid it and do not want to be stigmatized by such a description. The user specifically inserted the word, *ʔad-dafrah*, to convey or indicate a specific intended meaning. *ʔad-dafrah* is a slang word that is used frequently among college students. It is basically, in some areas of Saudi Arabia, the name of "single burner camping stove." Since he tweeted about an important educational topic, advising the newly enrolled students at his university about how to succeed in their college education, which is a serious topic, he utilized the SA or the H variety. His insertion of the SD or L variety is used to convey a specific meaning that can only be conveyed by using such a lexical item from the SD.

Tweet 4.20

أضف لذلك المسؤول الذي يُطبل له دوماً فينال مطبليه أعلى المناصب
.
تعلموا ثقافة التطبيل و الهدايا و الرشاوي فأستولوا و علوا و عَّم فسـادهم

"Add to that the official whose drummers **always** drum **for him so that** his drummers **obtain the highest-ranking positions. They learned the culture of** drumming**, gifts and bribes, thus they took over, rose high, and their corruption became widespread."**

This Twitter user severely criticizes a crucial social issue: social hypocrisy among public-sector employees in Saudi Arabia. Low-ranking workers always compliment their bosses even if they are wrong, or in other words, workers never oppose, criticize, or advise their bosses for the sake of the public good or common interests. In the SD, this behavior is called *drumming* because the sound of the drummer is so loud, so people cannot hear well during drumming. Similarly, high-ranking staff, bosses, directors, and general managers cannot clearly see the right path to work because the *drummers* prevent them from planning well. This is a significant problem in Saudi society, so the Twitter user utilizes SA. However, he switches code to the SD to convey specific intended meaning. The use of the word *drumming* as a verb and a verbal noun conveys meanings possible only through CS to the SD.

4.3.2 For joking and sarcasm

The current study found that CS to the SD was used for mocking, joking, sarcasm, and underhand or underlying criticism of a person, idea, or a social issue. The data showed that the SD or the L variety was utilized for humor, as it is not usually appropriate to use SA for joking. A switch to the L variety in some cases, as in Tweets (4.21) – (4.24), is a way of criticizing or refuting political, or social issues without facing the potential consequences. Thus, utilizing the L variety reduces the formality and seriousness of the criticism, and the user would therefore avoid the possible consequences of his/her stance either against or for a specific idea or an issue. Jokes and humor play important roles, as the data showed with regard to supporting or refuting a point, as well as in terms of indirect criticism of a point or when taking a stance. Tweets (4.21) – (4.24) show how CS to the SD conveys humor that combines sarcasm and underhand criticism.

Tweet 4.21

<div dir="rtl">

وبسبب صعوبة الحصول على بيت في السعودية فتحنا "بيت الكيك،بيت الدونات ،بيت العصيرات،بيت الروبيان ،بيت الكباب " لحد مايجي الفرج

</div>

"And because of the difficulty of getting a house in Saudi Arabia, we opened "cake house, house of donuts, juices house, house of shrimp, kabob house" until relief comes."

In this tweet, the user sarcastically describes a crucial issue in Saudi Arabia: home ownership, which is not easy to achieve. It is such a serious issue that in 2010 the previous King Abdullah established a new, independent Ministry of Housing because he realized the importance of resolving the housing problem. Thus, the user utilizes SA to draw the audience's attention to a problem that concerns all Saudi citizens. Then, she shifts to the SD to deliver underhanded criticism and sarcastically express her frustration, declaring that we will "open cake house, house of donuts, juices house, house of shrimp, kabob house"—the names of restaurants—and wait until the housing problem is completely solved.

Tweet 4.22

<div dir="rtl">

بيننا وبين اليابان ايدلوجيا !!
اثاريها سهلة وحنا مصعبينها 😎

</div>

"Between us and Japan is an ideology!!
So, it is easy, and we complicate it."

This Twitter user mocks a tweet by another user who is among the top leftist thinkers in Saudi Arabia. The leftist thinker claims in his tweet that Saudi Arabia has the ability to be the Japan of

the Middle East and does not lack anything to be a great country such as Japan. The only

obstacle, according to the thinker, preventing Saudi Arabia from succeeding and becoming a

first-world country is its "Islamic ideology." He encourages Saudi Arabia to abandon it and

argues that Islamic ideology is a symbol of backwardness. The user who wrote the present tweet

mocks the thinker and shows he is amazed by the simplicity and naivety of the claim. Moreover,

this Twitter user attacks the thinker and his party, singling them out for criticism and show how

naive the thinker is. The Twitter user switches to the SD for the purpose of mockery and

sarcasm.

Tweet 4.23

<div dir="rtl">

وكلاهما يمارس الإقصاء ضد خصومه .. شف عاد متى يجي
التحديث الجديد ..

</div>

"Both of them [left and right parties] are practicing exclusion against their opponents, so
we wait until the new update comes."

In Tweet 4.23, the Twitter user describes two parties in Saudi Arabia: those who are called

liberals by themselves and fundamentalists, on one hand, and those described as fundamentalists

by the liberals, on the other hand. He states that they both exclude anyone who does not belong

to their group or agree with them. This tweet is among several replying to another user, who

argues that Saudi society needs an authentic liberal group that truly believes in liberty, justice,

and freedom of speech. Unfortunately, those who claim to be liberals really are exclusionists like

the fundamentalists, and neither group represents real Saudi society. He, therefore, criticizes both

groups, especially for excluding others who do not belong to their party. He thus switches to the

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SD to criticize these groups' exclusion and mock them by saying even if a new update[10] arrive, the result will be the same, or in other words, no significant changes will occur. He expresses his frustration by stating that nothing could be done but to wait.

Tweet 4.24

<div dir="rtl">

#خبر
فحص طبي يتنبأ بالموت قبل 7 سنوات من حدوثه
#تعليق
مسخرة..! واحد توقعوا له يعيش7 سنوات!! طلع فرحان وتوطاه
ليموزين وقطعه 7 حتت

</div>

"#خبر #news
A medical examination predicts death 7 years in advance
#تعليق #comment
Ridiculous..! one, [they] expected him to live for seven years!! He went out joyously and a limousine runs over him and cuts him into seven pieces."

The Twitter user in this tweet commented on a news item regarding the prediction of person's death up to seven years in advance. The user was a Muslim and, in the Islamic faith, knowing or determining of the time of death for a specific person is among the things that are unseen, unwitnessed, and unknown except by God 'Allah' Himself: "[He is] Knower of the unseen and the witnessed, the Grand, the Exalted" (Qur'an 13, 9). Thus, Muslims and believers must have faith in predestination, which is one of the six pillars of faith in Islam; as the Holy Qur'an directs believers, "Say, 'Never will we be struck except by what Allah has decreed for us; He is our protector." And upon Allah let the believers rely" (Qur'an 9, 51). In another section, it states:

---

[10] A new update here means a new party, or a new group, or any changes that might occur to the Saudi society in the future.

"Say, 'Indeed, the death from which you flee - indeed, it will meet you. Then you will be returned to the Knower of the unseen and the witnessed, and He will inform you about what you used to do'" (Qur'an 62, 8). The user utilized the SD humorously to give an example of an unreal or hypothetical example of someone who had been told that he would live for seven additional years and, when exiting from the clinic, happy in the knowledge that he would live for seven additional years, was suddenly run over by a limousine and was cut into seven pieces. Therefore, how can such studies be trusted or believed in such cases? Thus, as the user perceived such a news item as an object of ridicule, he shifted to the SD or the L variety for the purpose of joking and humor.

4.3.3 To quote

The data showed that quoting was common in both directions of CS, from SA to the SD and vice versa, regardless of whether it was direct or indirect. The current study does not differentiate between direct and indirect quotes because both of them were found to be used in both directions, as shown above in Tweets (4.8, 4.9, and 4.10), and as will be shown in Tweets: (4.25, 4.26, and 4.27). The data also revealed that there were two types of quotes: authentic quotes, which were really said or written by someone, and hypothetical quotes in which the Twitter user made up a quote to indicate what the imaginary conversation partner would have said regarding the topic or issue under discussion, as Tweet (4.29) shows. This motivation 'quotation' for CS occurs in both direction of CS, from SA to the SD and vice versa, as Tweet 4.25 - Tweet 4.27 demonstrate.

Tweet 4.25

١ـ كنت في طوارىء أحدالمستشفيات، وشدني هذا المشهد:

الطفلة بخوف (ماما ما أبي إبرة)

والدتها تطلب منها تكرار الجملة حتى تصورها سناب شات !!

"I was in the emergency room in a hospital, and this scene attracted me: The girl with fear [says], "Mama, I do not want a needle [vaccination]!" **Her mother asks her to repeat the sentence in order to take a video for her and share it on Snapchat!"**

In this tweet, the user shares an authentic quotation from a scene she witnessed during a visit to an emergency room at a Saudi hospital: a young girl tells her mother that she is scared and does not want to get a vaccine. The mother asks her daughter to repeat what she said to make a video to publish on Snapchat. The user criticizes mothers for sharing videos of their children on Snapchat and other social media platforms. The user uses SA to discuss a crucial social issue: the publishing of videos of children on social media platforms, which might cause harm to them and might be considered to be child exploitation under Saudi laws. The user employs the SD in the quotation.

Tweet 4.26

<div dir="rtl">

تصرف خاطئ:
ان يكون مريضا بارتفاع الضغط المزمن ويأخذ علاج مزمن ولا
يراقب ضغطه!!
يقول آخر مره قست الضغط كان عيد الأضحي اللي فات 😱
😱

</div>

"Wrong behavior: To be ill with chronic hypertension, and he [the patient] takes a chronic treatment, and he [the patient] does not watch his blood pressure! He [the patient] says that the last time I measured my blood pressure was last Eid al-Adha [the Feast of the Sacrifice]."

This Twitter user, who is a medical doctor, admonishes patients who have hypertension but are careless about their blood pressure and do not monitor it. He raises a significant socio-medical issue because some people in Saudi Arabia pay no attention medical doctors' directions and instructions. The Twitter user employs SA to describe the case and signify its importance and then shifts to the SD to give a hypothetical quotation of what patients frequently say when asked about the last time their blood pressure was measured.

Tweet 4.27

<div dir="rtl">

أسطورة يونانيه قديمة تقول :
الغمازات هي بوسه من الملائكه على خدود
الأطفال وهم صغار ❤️ ✨

</div>

"An ancient Greek legend says:
Dimples are angels' kisses on children's cheeks when they are infants."

The Twitter user in this tweet reported indirect quote. Unlike Tweet 4.25, in which the Twitter user reported an authentic direct quote and Tweet 4.26 in which the Twitter user reported a hypothetical quote, the Twitter user in this tweet reported an indirect quote, namely a Greek legend explaining the reason for the dimples that appear on some children's cheeks. The legend attributes the appearance of dimples on children's cheeks to angels who kiss children when they are newly born. Thus, the user shifted to the SD to signal an indirect quote; furthermore, such a CS could be included under the motivation to simplify and explain, for which the SD or the L variety is usually utilized.

4.3.4 To explain and exemplify

The current study revealed that there were two types of examples of explanations: 1- true examples and 2- hypothetical examples. The current study found that, in some cases, Twitter users switched to the SD or the L variety to explain and simplify because the L variety was perceived as being easier. With regard to this social motivation for CS to the SD, the Twitter user believed that his or her followers needed more clarification and explanations in order to understand his/her statement; thus, he/she shifted to the SD for that purpose. Tweet 4.28 - Tweet 4.30 show more details of this type of CS.

Tweet 4.28

<div dir="rtl">

الكلمه الطيبه صدقه .. لو نرجع لشعور الشخص الي نقوله كلام
حلو نعرف ليه ربي يجازينا عليها :(،
انتم متخيلين تاخذون اجر عشان فرحتوا انسان ثاني؟

</div>

"The good word is a charity … If we return to the feeling of the person to whom we say sweet words, we will know why my God rewards us for it [for the good word] :(,
Can you imagine getting a reward because you made somebody happy?"

In this tweet, the user attempts to explain a Prophet Muhammad's: "It is also charity to utter a good word." She utilizes SA to quote this prophetic saying and then shifts to the SD to explain and simplify it. In addition to using the SD, she employs the interrogative style in the L variety to encourage her followers to imagine how God will reward them for doing such an easy thing, to say a good word to others to cheer them up.

Tweet 4.29

<div dir="rtl">
المعايير تعلن كل سنة وممكن تختلف ، أتوقع اخر ترم كانت بداية فوق ٣ وبعدين صاروا ينزلون المعدل المطلوب لين وصلوا للعدد اللي يبغونه
</div>

"**The criteria are announced every year and may vary**. I expect that it [the required GPA] was initially above 3.0 last semester, then they reduced the required GPA until they reached the number they aimed for."

This Twitter user explains the criteria for the college-student-exchange program at King Fahd University of Petroleum and Minerals to one of his fellows. He shifts from SA or the H variety, when he took the role of the expert, to the SD to simplify his explanation of how the criteria are decided and might differ every year. He shifts to the SD or the L variety to simplify the explanation of the criteria for the college-student exchange as they differ every year depending on students' GPAs and the targeted number of students. In other words, the student's GPA is not the only criterion, but the targeted number of students is also considered.

Tweet 4.30

<div dir="rtl">

من انظمة الاستعباد انك لمن تجي تشتري اكل لمجموعة ناس
تفرض رايك وتشتري حسب ماتشتهي.

</div>

"**One example of enslavement** is that when you want to buy food for a group of people, you impose your opinion and just buy what you desire."

This Twitter user gives a sarcastic or humorous example of human enslavement. According to him, an example of human enslavement is imposing one's choices or opinions on others and the denial of others' opinions. The user thus initially employs SA to show how serious the topic he explains is, especially because it encompasses concepts usually referenced when discussing crucial topics, such as human trafficking, and enslavement. Then, he shifts to the SD or the L variety to give a sarcastic example of enslavement from his perspective, which is imposing one's choices on others by purchasing only what one desires and likes.

4.3.5 To introduce sayings about daily life

The present study found that Twitter users may switch to the SD or the L variety to connect with their followers or audience through sayings about everyday life, such as proverbs, idioms, and cultural expressions. This facilitates comprehension of complicated ideas in the context, which Tweet 4.31 - Tweet 4.33 illustrate.

Tweet 4.31

<div dir="rtl">

نحن في حالة حرب ضد أطماع إيران، هنا لاتنطبق(أنا وأخي
على إبن عمي وأنا وإبن عمي على الغريب)بل أنا مع من يساند
وطني ضد كل من خذله ولو كان أخي!

</div>

"**We are in a state of war against Iran's ambitions. Here, [the saying] is not applicable** (my

brother and I are on [against] my cousin, and my cousin and I are against the stranger), **but rather, I am with who supports my homeland against whoever let it down and even if he was my brother!**"

This Twitter user states that we, the Saudi people, are in a state of war against Iran, and he criticizes the role of the Qatari government in the conflict between Saudi Arabia and Iran. In other words, he alludes to the betrayal of the Qatari regime in this conflict, which makes it no longer trustworthy. To emphasize his idea, he switches to the SD citing an Arabic saying to prove that it is absolutely not applicable to the Saudi conflict with Iran. He inserts the saying, which is in the SD or the L variety, to support his argument against the Qatari regime and emphasize the idea of the loyalty to the homeland. For the sake of security of his country, he stands with whoever supports his country, and he stands against whoever lets his country down, even if he is a brother. By repeating this proverb, he alludes to the Qatari regime and attempts to convince his followers and audience.

Tweet 4.32

<div dir="rtl">

#طعن_طبيب_بالمدينه

تصرف غير مسؤول...من لديه حق وشكوى يلجأ للجهات المختصه ولا يأخذ حقه بيده.
مفهوم (خذ حقك بدق الخشوم) لاينفعك بل يضرك!!

</div>

"**#stabbing a medical doctor in Madina:**
Irresponsible behavior ... Whoever has a right or a complaint should complain to the designated authorities and never take his right with his hand. The concept of [taking your rights by beating noses [by force]] **does not help you; it rather will harm you!**"

This Twitter user comments on a trending hashtag about the stabbing of a medical doctor in Al-Madina. The user, also a medical doctor, criticizes the prevalent attitude of haughtiness, especially among younger generations. The user code switches to the SD to employ an expression commonly repeated among such haughty, boastful, and bragging groups to show his condemnation of such unacceptable behavior. This saying calls for ignoring the role of the government in controlling security and maintaining rights, thus legitimizing insecurity, instability, chaos, and the lack of peace. The user uses SA because he discusses a crucial social issue and shifts to the SD to cite a saying of daily life and argue against it.

Tweet 4.33

<div dir="rtl">

#تنظيم_مكافات_الطلاب_الجديد بالمُعدل سيضع ضغطا اجتماعيا جديدا على أعضاء هيئة التدريس ويتحول التدريس لمراعاة "قطع الأعناق ولا قطع الأرزاق"

</div>

"**#The new regulations of college students' stipends (linking the stipend with student's GPA) will exert a social pressure on [Saudi universities] faculty members, transforming teaching into mere consideration of** 'cutting the necks rather than cutting off livelihoods'"

The Twitter user in this tweet commented on an important issue that mainly concerned college students in Saudi Arabia; as a result, the college educational system in Saudi Arabia as a whole would be impacted negatively. College students in Saudi Arabia who maintain a minimum GPA of 2.00 out of 5 receive a monthly stipend that varies between SAR 850 and SAR 1000 '$222 - $266' based on the students' majors. The user in this tweet commented on a hashtag that was trending in Saudi Arabia after some rumors that the Saudi government was planning to introduce new regulations governing students' monthly stipends had been leaked. The leaks concerning the new regulations mentioned that only students with high GPAs who maintained an outstanding

status would be the only ones to receive a monthly stipend. Thus, the user tweeted against the idea of depriving college students of their regular monthly stipends because such prevention or regulation would definitely have a negative impact on the academic achievements and progress of college students because they would focus more on convincing their professors to give them extra credits based on the justification of curtailing their monthly stipends. In other words, by the end of every semester, and particularly during the finals, students would beg their professors for compassion under the pretext that they would be deprived of their monthly stipends. Therefore, the user imagined how the college professors would consider and pay attention to the issue of students' stipends in their teaching practice, and assumed they would repeat a cultural expression that can be translated as "taking a life is easier than cutting off a livelihood," which means that sudden death is preferable to a slow death resulting from the cutting off of a livelihood. However, the Twitter user utilized SA because the topic was an important educational issue, and then switched the code to the SD for the purpose of introducing a well-known idiom.

4.3.6 To scold, insult, and personally attack

The data in the present study show that the L variety or the SD is used to scold, insult, and personally attack others, as seen in Tweet 4.34 – Tweet 4.36.

Tweet 4.34

<div dir="rtl">

نداء لأعضاء مجلس الشورى المحترمين

لو عندكم مقترحات جيدة مفيدة للوطن والمواطن تفضلو
ومشكورين ، واذا ما عندكم ارجوكم اسكتو احنا مو ناقصينكم!

</div>

"**A call to the distinguished members of the Consultative Assembly:** If you have good

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proposals beneficial to the homeland and the citizens, go ahead and thank you, [but] if you have nothing, please be quiet; we are in no need for you to bother us!"

In this tweet, the Twitter user dispatches a scolding message to the members of the Consultative Assembly in Saudi Arabia. She demands that they cease provocative statements, particularly by some members who have refused some suggestions that would benefit citizens, thereby widening the gap between the Consultative Assembly and Saudi citizens. In response, demands to eliminate the Consultative Assembly have arisen, claiming that it is useless and wastes money, especially amid a period of austerity in the Saudi government. Thus, the user asks the Consultative Assembly members to adopt suggestions beneficial to both citizens and the homeland; otherwise, they should be silent because Saudi citizens have many other issues to take care of other than them. This user switches to the SD for the purpose of insulting and personal attacking others.

Tweet 4.35

<div dir="rtl">

#وين_الاستطلاع_ياحقيل

الحقيل يريد من المواطنيين تصديق نتائج تصويتهم وهم لم يصوتوا اصلاً ،

إما انه دلخ او أنه مستدلخ الشعب

</div>

"**#Where is the questionnaire, Hekail?**
Al-Hekail wants citizens to ratify the results of their [Center of Poll and Measuring] voting, and they [the citizens] did not even vote at all. He is either a fool, or he is fooling the people."

This Twitter user personally attacks and insults the director of the Center of Poll and Measuring in Saudi Arabia over a social issue related to the General Authority for Entertainment. Al-Hekail, director of the Center of Poll and Measuring, stated that 77% of Saudis support the Saudi

government's 2030 Vision, and 82% prefer entertainment events in public-gathering places. However, the user opposes entertainment events in public-gatherings places and the General Authority for Entertainment because she believes that its current events, activities, and views of entertainment contradict Saudi values and traditions. Consequently, she switches to the SD to scold and insult the director of the Center of Poll and Measuring and accuses him of lying. She personally attacks him by saying he is either a fool or is fooling Saudi citizens.

Tweet 4.36

<div dir="rtl">

قرار فتح مدرجات النصر لجماهير الهلال قرار سليم
فمن غير المعقول أن أشاهد تزاحمهم وأمنع دخولهم لأجل
جمهور متسدح في بيته يقول لا أحد يجي مدرجنا

</div>

"**The decision to open the grandstand section of An-Nasr fans for Al-Hilal fans is a good decision; it is unreasonable to see [the grandstands section of Al-Hilal] crowded [while grandstand section of An-Nasr is empty] and prevent their entry to [the grandstands section of An-Nasr]** for the sake of fans sitting lazy in their homes saying no one should come to our grandstands section."

The Twitter user in this tweet was commenting on a sports issue, namely the division of the grandstand between the fans of two major teams in the capital city of Saudi Arabia, as pointed out above. The fans of Al-Hilal attended the match and their section was completely occupied, whereas for the fans of the other team, An-Nasr, only a small number of fans attended the match. Accordingly, the stadium administrators decided to open An-Nasr's section to the fans of Al-Hilal. The fans of An-Nasr then protested and rejected this decision. The user utilized SA because he was discussing an official organization's decision, and SA is the official language of Saudi Arabia. He then switched to the SD or L variety to insult the fans of An-Nasr. Thus, this is

a personal issue in which he used the SD to launch a personal attack and to insult the An-Nasr team. He insulted them by describing them as ignorant, arrogant, and lazy.

4.3.7 For common usage

The data showed that some switches occurred for no clear reason except that they were commonly used in daily speech; thus, the Twitter user merely inserted them into some tweets that were otherwise completely written in SA. The insertions of the SD or the L variety occurred in demonstrative pronouns, future markers, relative pronouns, and negation. Similarly, there are some other switches that occurred for no clear reason except that they were used in daily speech and originally borrowed from English, then incorporated into the L code, which are Twitter-related terms and words such as: retweet, hashtag, mention, and trend. In reality, they are difficult to assign to any of the abovementioned motivations. Such switches merely consist of single words. They occur in the midst of tweets that are otherwise written completely in SA. Thus, the only reasonable motivation for such switches is that they are commonly and popularly used on a daily basis in spoken language and, due to such intensive usage, they are inserted in the midst of tweets that are otherwise written entirely in SA. The following Tweet 4.37 - Tweet 4.40 illustrate the occurrence of such switching.

Tweet 4.37

اسماء كثيرة راح نفتقدهم ، استفدنا مِن علمهم و انتهلنا من اخلاقهم .
جزاهم الله خير ، وحفظهم أينما كانوا 🌷

"**Many names we** will **miss them, we benefited from their knowledge and learned from their morals.**
May Allah reward them well, and save them wherever they are."

The Twitter user in this tweet utilized SA since she was writing about a formal situation in which she and her classmates were saying goodbye to a professor who had taught them at college. She wrote her tweet at her professor's retirement celebration; thus, it was a formal context in which she still needed to show respect for her professor. However, she inserted a single word from the SD or (L) variety, which is the future marker *raːħ/raħ* 'will'. In Standard Arabic, there are two future markers, which are the prefix *sa* to indicate the *immediate* future, and the particle *sawfa* to indicate the remote future, and both of them mean (will). Therefore, the user inserted this word from the SD for no clear reason except for the popularity and common usage thereof.

Tweet 4.38

جناح الطفل بـ #معرض_الرياض_الدولي_للكتاب جناح متميز
وأثار دافعية صغاري لزيارته مره أخرى.. مثل هالفعاليات
أنتظرها بفارغ الصبر 📘📚

"**Children's section in #Riyadh International Book Fair is excellent, and it stimulated the motivation of my kids to visit it again..** Such events **I am waiting for [them] impatiently.**"

The Twitter user in this tweet complimented the international book fair that is held in Riyadh every year. In particular, she complimented the children's section for the ways in which it motivated her children to reading and to visit the fair again, stating that she was waiting for the next event with impatience. She utilized SA in her tweet because she was writing about a social issue that concerned culture, education, and the enlightenment of society. Accordingly, the matter is not personal. However, she inserted a demonstrative pronoun from the SD or the L

variety when using **ha-l-faʿāliyyāt** rather than **hāthihi** l-faʿāliyyāt because the demonstrative

pronoun for plural non-humans in SA is *hāthihi* (these all non-human).

Tweet 4.39

<div dir="rtl">

@3ajel_ksa من المشكلات اللي لاحظتها في بعض الحدائق العامة عدم توزيع الحاويات بشكل كاف ومناسب مما تجعل البعض يتكاسل في تنظيف مكانه.

</div>

"**Some of the problems** that **I observed in some of the public parks, outdoor trash cans are not distributed adequately and appropriately, which makes some people too lazy to clean the places in which they sit.**"

The Twitter user in this tweet was reporting a problematic issue that she witnessed in most of the

public parks in her city, namely that there was an insufficient number of trash cans and that they

were not distributed appropriately. She utilized the SA or the H variety because she was

reporting a serious social issue that concerned society and public facilities. It is a public matter,

not a personal matter; otherwise, the writer would have used the SD or the L variety. However,

the user inserted a single word, the relative pronoun *ʔilliː*, 'that', from the SD or L variety. In SA,

the relative pronoun that would have been used in this tweet is *ʔallatiː* "that." Therefore, the user,

who was a highly-educated woman, inserted a single word from the SD in this tweet for no clear

reason other than common usage.

Tweet 4.40

الدراسة مع أهميتها لكنها مو الشيء الوحيد في الحياة. يصعب
استيعاب أن خريجة جامعية لم تقرأ رواية أو كتب متنوعة ترد:لا
أهتم بالقراءة (!!)

"Although education is important, but it is not **the only thing in life. It is difficult to
comprehend that a university graduate who never read a novel or various books, replies
[the university graduate]: I am not interested in reading (!!)"**

The Twitter user in this tweet was a highly-educated woman who emphasized the importance of

additional and external reading beyond the assigned reading in classes and curricula. She also

expressed her astonishment at and disagreement with students who did not read in addition to the

assigned readings in curricula. She assumed that students have to read novels and other sources

to expand their knowledge and broaden their comprehension instead of confining their education

and sources of knowledge to assigned readings at their schools and universities. This is a crucial

issue that is presently of concern for educators as college students' interest in reading has

diminished significantly. Thus, she utilized the SA or the H variety. However, she inserted a

single word, the negation word *mu:* "not," from the SD or the L variety rather than the negation

word in SA, which is *laysat*. Such a switch occurred for no clear reason other than common

usage on a daily basis.

The data show intensive use of Twitter-related terms and words: retweet, hashtag,

mention, and trend. Using such terms could be attributed to their common use on a daily basis, or

it is also possible that such terms were used because the users do not know their equivalents in

SA. The current study finds that such terms have been Arabized and used in noun and verb forms

despite the availability of equivalents in SA. It might be argued that such switching is CS to

English or borrowing. However, I argue here that such Twitter-related words have been used as

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spoken or L variety and no longer used as English lexical items. Moreover, Tweet 4.41 – Tweet 4.43 illustrate how such Twitter-related terms have been used as L code. Clearly if a reader reads these tweets out loud, it will be clear how these particular words are pronounced in L variety.

Tweet 4.41

<div dir="rtl">

#اجمل_مالقيت_بتويتر

:

:

اي مسؤول مقصر هشتقه وينخرش على طول

</div>

"#The best I found in Twitter
Any high ranked negligent responsible, just *hashtag* him, and immediately he will be scared."

Tweet 4.41 shows how the Twitter-related term hashtag was incorporated into the L code and used as a verb *haʃtiqah-h* "hashtag him."

Tweet 4.42

<div dir="rtl">

#تبليك_افنان_الباتل_ونملتها١
وش السالفه ليه الهاشتاق قلب انجليزي نبي هشتقه بالعربي تبرد القلب😂

</div>

"#Blocking Afnan Al-Batil and its ant
What is the story, why did the hashtag switch to English, we want a *hashtag-ah* in Arabic that causes heartwarming."

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Tweet 4.42 also shows how the Twitter-related term hashtag was also used in a tweet that was fully written in the SD or the L code and it was used in L code as a verbal noun; *nabi: haʃtiqah* "we want a hashtag."

Tweet 4.43

<div dir="rtl">

عطونا هاشتاق زين

</div>

"Give (suggest) us a good *hashtag.*"

Tweet 4.43 shows how the Twitter-related word hashtag also was used in L code. I asked three native speakers of Saudi dialect to read this tweet out loud to examine their way of pronunciation, and, as I predicted, they read it as: *ʕatˤ-u:-na: ha:ʃta:g-in zayn* "Give (suggest) us a good hashtag." It is noticed that they pronounced *ha:ʃta:g-in* with nunation and this indefinite use of nunnation is attested in Saudi dialect. However, nunation in this case violates Standard Arabic grammar. Moreover, loan words (nouns and adjectives) in Arabic grammar are diptotes, which means that they, in addition to their endings rules, "they do not exhibit nunation تنوين when used in the indefinite" (Alhawary 2011, p. 343). Therefore, Twitter-related terms were considered as L variety.

However, their SA equivalents might not be known to all Twitter users because they might not be as popular and common as the Twitter terms. Tweet 4.44 - Tweet 4.46 show this in more detail.

Tweet 4.44

<div dir="rtl">

أعتذر لقيامي بمسح التويتات ثم إعادة نشرها وذلك بسبب خطأ
وقع مني يرتبط بالهاشتاق ، أتمنى مساندة هذا الموضوع الخطير
ودعمه فذلك دعم للمجتمع

</div>

"I apologize for deleting the *tweets* and then reposting them due to a mistake I made related to the hashtag. **I am hoping for assistance in this serious issue and support for it, since this would be in support for the community."**

The user employs SA in this tweet, except for two inserted words borrowed from English that are specific Twitter terms: *retweet* and *hashtag*. Such terms have been Arabized and used as verbs and nouns but are treated as the L variety because SA equivalents are available. For example, hashtag is used as a noun and a verb, although it has an SA equivalent. Thus, the lack of facility or an equivalent is not the motivation for such CS. The author uses SA because she writes about an important social issue, divorced mothers prevented from seeing their children, but she shifts to the SD or the L variety due to the common use. Some might question why she switches to the L code even when SA equivalents are available. The counterargument is that such equivalents possibly are not as well-known as the Twitter terms (e.g., hashtag, retweet, and mention), which seem to be more popular and common in social media language.

Tweet 4.45

<div dir="rtl">

لا أتشرف بأي متابعة أو رتويت أو تفضيل من حساب إباحي
لذلك البلوك هو الحل !
أنتم ڤايروس أخلاقي خبيث الكل يتجنبه ويشمئز منه!
ارجعوا إلى الله

</div>

"I am not honored to have a following or *a retweet* or a like from a pornographic account;

therefore, the block **is the solution! You are a dirty moral virus that all people avoid and are disgusted by! Return to Allah [God].**"

In this tweet, the user warns her audience, particularly pornographic accounts, to not follow her, like any of her tweets, or even retweet any of her tweets. Otherwise, she says, "*the block*" (she will block them) is one way to get rid of them. They are a virus that must be fought, and social media must be cleansed of such accounts. This is an increasingly important social issue as pornographic accounts become more active, especially in trending hashtags. She, therefore, uses SA to indicate the seriousness of the topic but, due to the lack of a register, also inserts Twitter terms, such as *retweet* as a noun and *block* as a noun with the SA definite article added to it as a prefix *ʔal-bluk*. She borrows words, although they have SA equivalents, displaying a preference for using borrowing words over SA equivalents for no reason except the common usage.

Tweet 4.46

<div dir="rtl">

أتمنى منكم دعم هاشتاق #مرضى_ضمور_العضلات

قصص البعض فيه مؤلمة وتستحق النشر..
لأنها تحمل في طياتها معاني الصبر ومفيدة كثقافة صحية
وحقوقية..!

</div>

"**I am hoping that you support** hashtag of #مرضى_ضمور_العضلات# **muscle atrophy in patients**
Some of their stories in it [the hashtag] are painful and newsworthy.
Because they [the stories] carry the meanings of patience and are useful as a culture of health and human rights."

The Twitter user in this tweet tweeted and participated in a socio-medical discussion regarding those patients who suffer from muscular atrophy. He asked his followers on Twitter to support

and promote the hashtag for muscular atrophy in patients in order for it to become a trending topic. He was a medical student and participated in some events in which the muscular atrophy patients narrated some of their grievous and sorrowful stories. Their stories are thus excellent examples of lessons from which audiences can learn about the real meanings of patience as well as about the culture of health and patients' rights. Thus, he utilized the SA to tell his followers about a serious topic, but he inserted a single word from the SD or the L variety due to their common use. Although the equivalent of hashtag in SA is *wasm*, it might not be as popular or usable as is its equivalent *wasm*.

4.3.8 An overlapping of the functions of SA with the SD

Finally, in addition to the above-mentioned social motivations for CS to the SD, the study found another category. This category comprised an overlapping of the functions of SA with the functions of the L code on Twitter. Moreover, the data revealed that CS to the SD occurred in some tweets in which SA was the only appropriate code to use. In some supplications and prayers, CS to the SD occurred, as shown in Tweet 4.47 - Tweet 4.49.

Tweet 4.47

<div dir="rtl">

يارب كما بلغتني رمضان ، بلغني يوم التخرج ، و
يوم الوظيفه و كل الايام الحلوه اللي توني ما
وصلت لها 😢💙

</div>

2:31 AM - 30 May 2017

"O Lord! As You made me reach Ramadan, make me reach the graduation day, the employment day, and every other sweet day that I haven't reached yet!"

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Tweet 4.48

اللهم اني اسئلك باسمك الأعظم ووجهك الكريم
اللذي لا يسئل به الا الجنه انك تخليني اعديه 💔")

4:27 PM - 16 May 2017

"O Allah, verily I beseech You in Your greatest name and most gracious "honorable" face, in which one shouldn't beseech you for anything except for heaven, that you make me pass it [the exam]."

Tweet 4.49

يارب اني اصحى على اخبار حلوه نفس الي في
بالي يارب بشرني بصباح حلو نفس الي ابغاه 🌷
💔.

1:58 PM - 17 May 2017

"Oh Lord, make me wake up on the exact good news that I have in mind. O God give me good tidings of the exact sweet morning that I want."

In Tweet 4.47 – Tweet 4.49, female Twitter users with less than college education began their tweets as merely prayers and supplications in SA. Then, they shifted to the SD for no clear reason. Such switching was found to occur as a result of overlapping in the functions of SA versus the functions of the L code. In other words, for supplications and prayers, SA could be said to be the default and the appropriate code to use. However, the Twitter users in Tweet 4.47 – Tweet 4.49 code switched to the SD for no clear reason. There are two possible interpretations for such CS to the SD. The first is that Twitter users may lack knowledge of the H code, and the

second is that the code chosen by Twitter users may be a matter of preference, as will be discussed in Chapter 5 of the current study.

4.4 The Role of Gender and Education in Codeswitching Patterns

By analyzing 7350 tweets, the data displayed that Saudis used SA in their tweets 4376 times (60%), which is a high percentage. Whereas, the SD was used in 1851 (25%) of their tweets. As for CS, the data revealed that Saudis often maintain SA in their tweets; less often they use the SD; however, in some cases they switch between SA and the SD. Moreover, the data showed that only 333 (5%) of the collected tweets included CS to SA, while 790 (11%) of the collected tweets contained CS to the SD. By combining these, the result will be 1123 (15%) of the collected tweets include CS in both directions, which is still not high.

The role of gender and education together is evident in the CS patterns. Through analyzing 7350 tweets, the data revealed that men with high education used the SA 84% of the time, which is very high in comparison to their use of the SD at 4% of the time, which is very low. The data also showed that men with high education switched to SA 2.1% of the time, while they switched to the SD in only 9% of the collected tweets. Similarly, women with high education used the SA 80% of the time, which is also very high, while they used the SD 6% of the time. The data also revealed that women with high education shifted to SA in 3.4% of their collected tweets, while they switched to the SD in 9.5% of their collected tweets. Men with college education utilized SA 66% of the time, which is also high, while they used the SD 14% of the time. The data also exhibited that men with college education switched to SA in 4.8% of their collected tweets, while they shifted to the SD in 14.5% of their collected tweets. Women with college education used SA 60% of the time, which is also high. In contrast, they used the SD 26% of the time. The data illustrated that women with college education switched to SA in

4% of their collected tweets, while they shifted to the SD in 9% of their collected tweets. The data displayed that men with less than college education utilized SA 37% of the time, which is low in comparison to the previous groups. However, they used the SD 43%. The data also exhibited that men with less than college education switched to SA in 6% of their collected tweets, while they shifted to the SD in 14% of their collected tweets. The data indicated that women with the less than college education used SA 28% of the time, which is low. On the contrary, they used the SD 55%, which is high. The data also exhibited that women with less than college education switched to SA in 7% of their collected tweets, while they shifted to the SD in 9% of their collected tweets.

If we compare the usage of language in terms of gender, after analyzing 3675 tweets that were written by men, the current study found that men utilized SA more often than women. Moreover, 63% of men's tweets utilized SA, while they used the SD in 21% of their tweets. As for CS, the data exhibited that men switched to SA in 4% of their collected tweets, while they shifted to SD in 12% of their collected tweets. After analyzing 3675 tweets that were written by women, the data indicated that women used SA 56% of the time, while they used the SD in 30% of their tweets. The data also demonstrated that women switched to SA in 5% of their collected tweets, while they shifted to the SD in 9% of their collected tweets.

With respect to the role of education alone, by analyzing 2450 tweets, the data illustrated that Saudis with high education utilized SA in 82% of their tweets, which is very high. Whereas, they used the SD with 5%, which is obviously very low. The data also exhibited that Saudis with high education switched to SA in only 3% of their collected tweets, which is very low. By contrast, they shifted to the SD in 9% of their collected tweets. In comparison to those with college education, the data showed that SA was used 63% of the time, which is also considered

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high. On the contrary, the SD was used in 21% of their tweets. The data also exhibited that Twitter users in Saudi Arabia with college education switched to SA in only 4% of their collected tweets, which is also low. However, they shifted to the SD in 12% of their collected tweets. Lastly, the data also demonstrated that the Saudis with less than college education used SA 33% of the time, which is low, while they used the SD 49%, which is not too low. The data also exhibited that Twitter users in Saudi Arabia with less than college education switched to SA in only 7% of their collected tweets, which is also considered very low, whereas, they shifted to the SD in 11% of their collected tweets. Thus, the data illustrated that Saudis with high education and college education maintain SA more than their counterparts with less than college education. As for the role of gender, the data also displayed that men regardless of their level of education use SA more than women. Tables 4.3, 4.4 and 4.5 demonstrated by figures 4.1, 4.2, and 4.3, respectively, represent the total number of tweets according to each group. Gender and education level are considered together and separately.

Table 4.3 The Numbers and Percentages of Tweets for Each Group.

Category	# Tweets in SA	# Tweets in SD	# CS to SA	# CS to SD
Men – High Education	1033 (84.33%)	53 (4.33%)	26 (2.1%)	113 (9.22%)
Women – High Education	988 (80.65%)	80 (6.53%)	41 (3.35%)	116 (9.47%)
Men – College Education	810 (66.12%)	180 (14.69%)	59 (4.82%)	176 (14.45%)
Women – College Education	740 (60.41%)	327 (26.69%)	47 (3.84%)	111 (9.06%)
Men – Below College Education	458 (37.39%)	528 (43.10%)	70 (5.71%)	169 (13.80%)
Women – Below College Education	347 (28.33%)	683 (55.76%)	90 (7.35%)	105 (8.57%)

Figure 4.1 The Numbers of the Collected Tweets for Each Group.
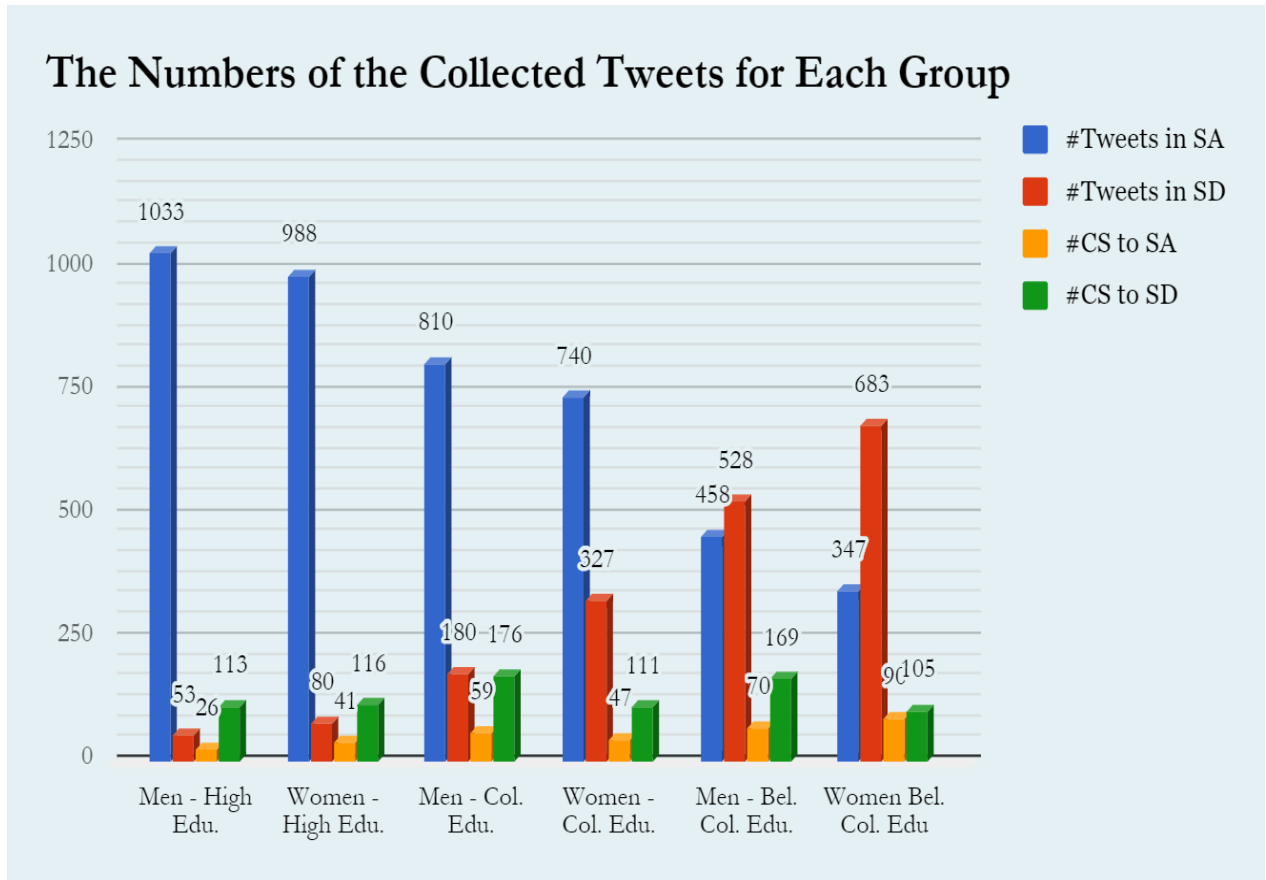
Table 4.4 The Numbers and Percentages of Tweets Based on Gender.

Gender	#Tweets in SA	#Tweets in SD	# CS to SA	# CS to SD	Total
Men	2301 (63%)	761 (21%)	154 (4%)	459 (12%)	3675
Women	2075 (56%)	1090 (30%)	178 (5%)	332 (9%)	3675

Figure 4.2 The Numbers of Tweets Based on Gender.

The numbers of tweets based on gender

Legend:
- Men (blue)
- Women (red)

Category	Men	Women
Tweets in SA	2301	2075
Tweets in SD	761	1090
CS to SA	154	178
CS to SD	459	332
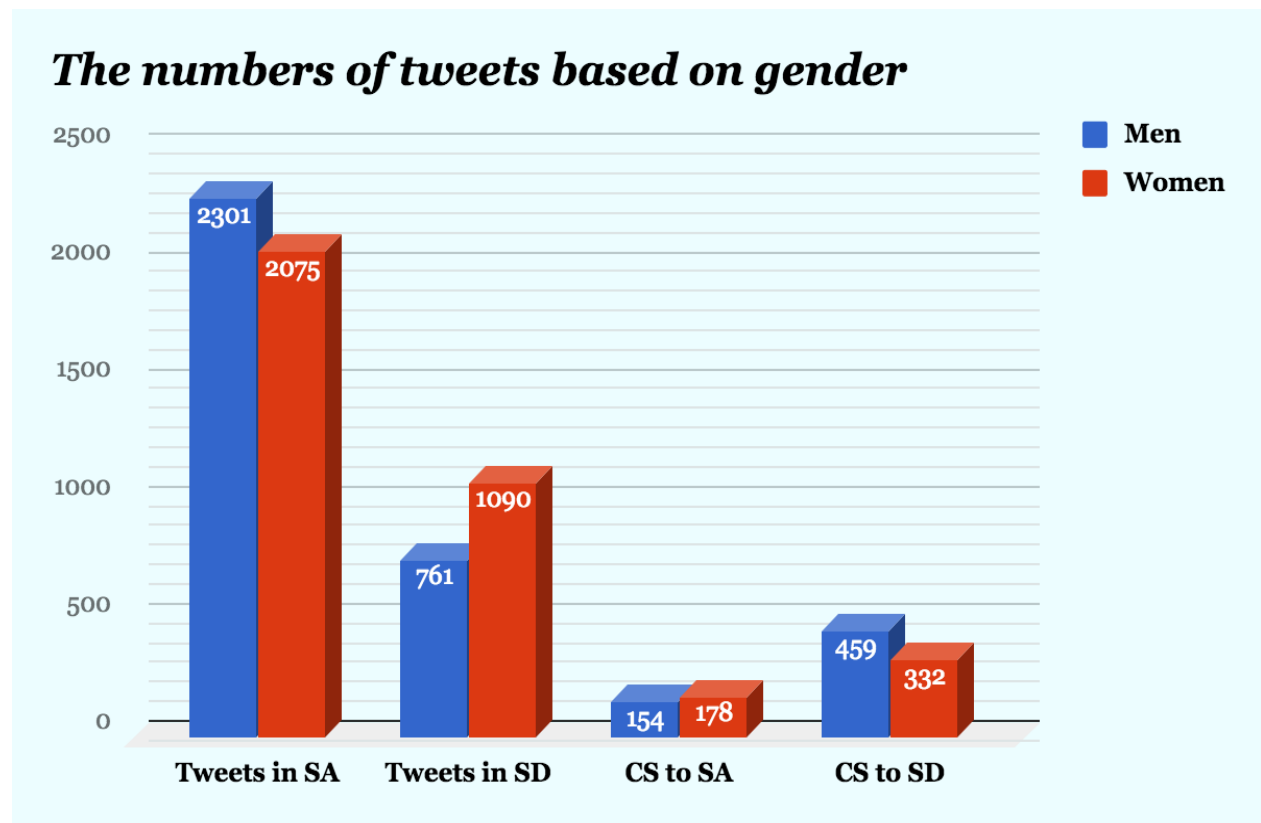
Table 4.5 The Numbers and Percentages of Tweets Based on the Level of Education.

Level of Education	#Tweets in SA	#Tweets in SD	# CS to SA	# CS to SD	Total
High Education	2021 (82%)	133 (5%)	67 (3%)	229 (9%)	2450
College Education	1550 (63%)	507 (21%)	106 (4%)	287 (12%)	2450
Below College Education	805 (33%)	1211 (49%)	160 (7%)	274 (11%)	2450

Figure 4.3 The Numbers of Tweets Based on the Level of Education.
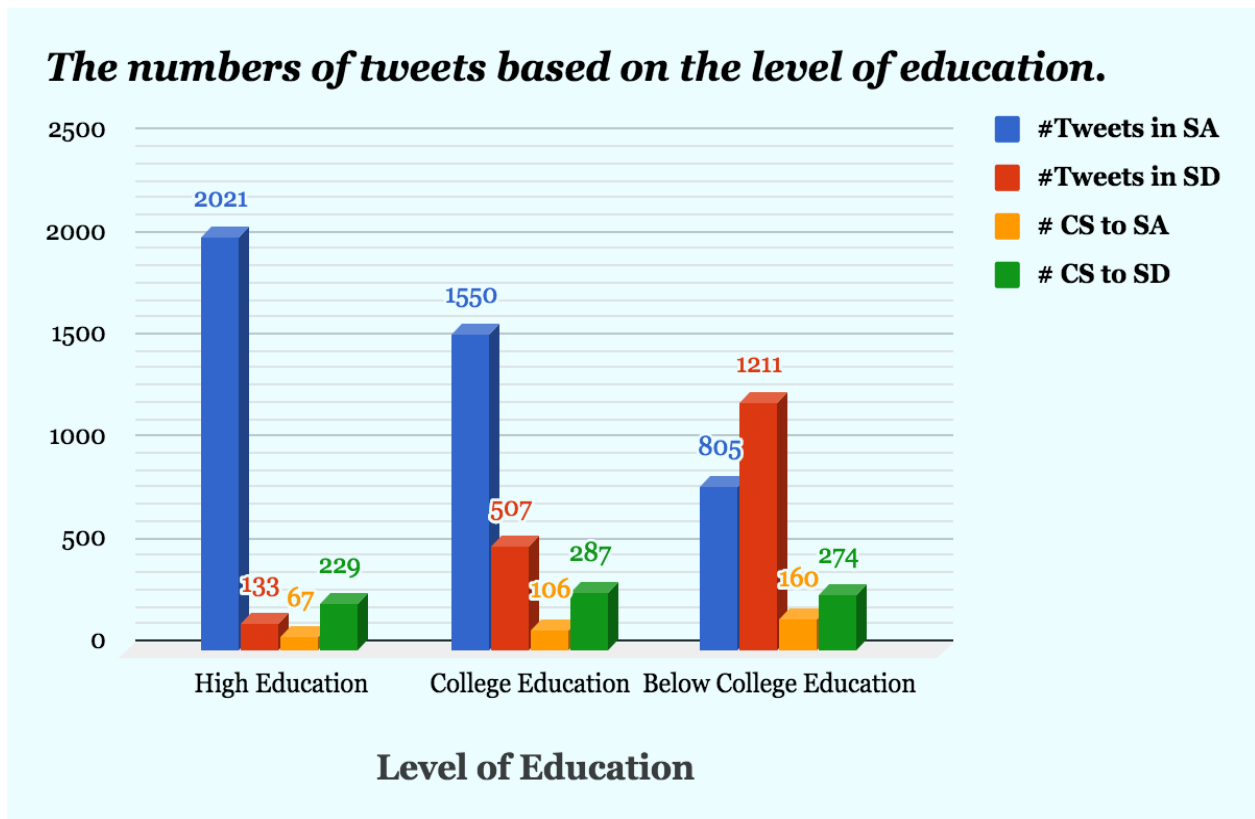
4.4.1 Men with high education

The total number of collected tweets from men who were highly educated was 1225. The analysis of the collected tweets showed that 1033 (84.33%) tweets were in SA "High Variety," whereas only 53 (4.33%) tweets were in DA "Low Variety." The data also showed that there were 25 (2.04%) tweets that contained of CS from the SD to SA, while 113 (9.22%) tweets incorporated a CS from SA to the SD. Figure 4.4 illustrates use of the collected tweets.

Figure 4.4 The Collected Tweets of Men with High Education.
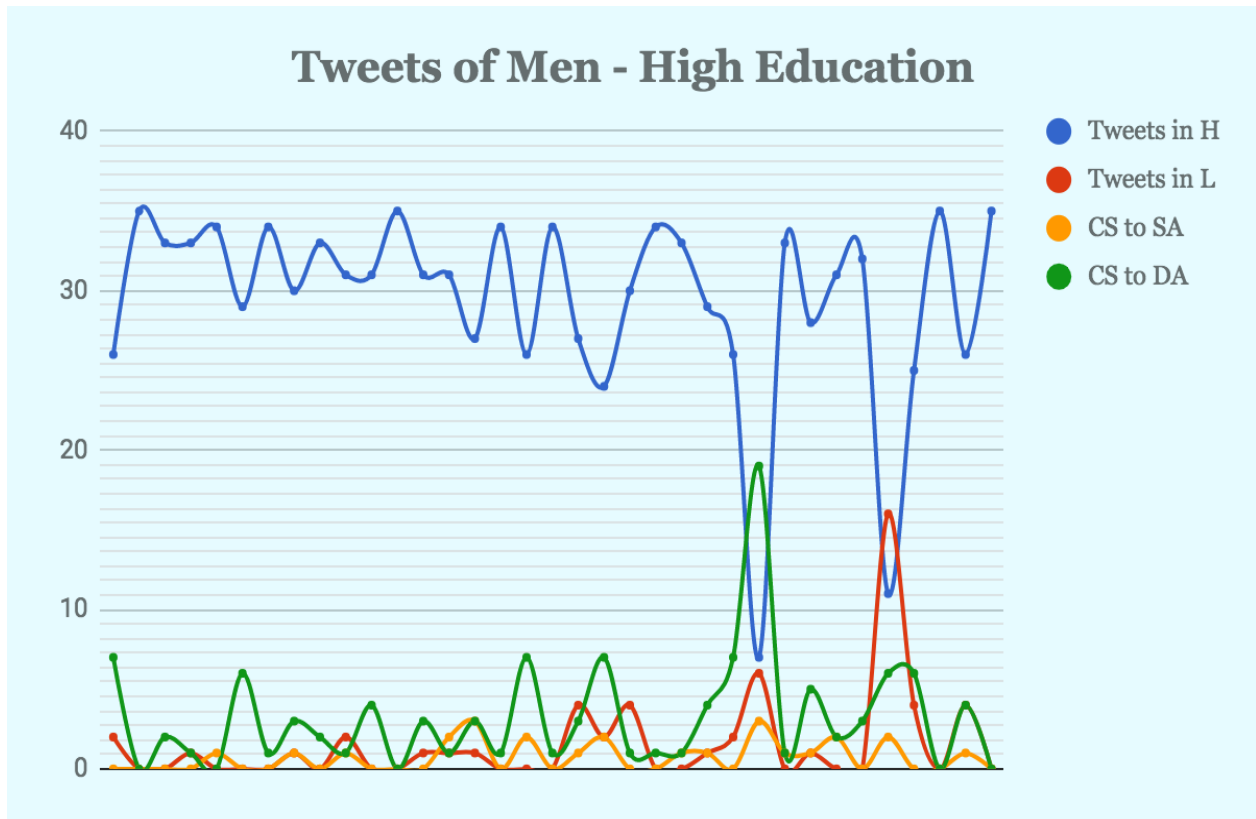
Table 4.6 Numbers of Tweets for Each Twitter Account among Men with High Education.

Accounts	Tweets in H	Tweets in L	CS to SA	CS to DA	Total
1	26	2	0	7	35
2	35	0	0	0	35
3	33	0	0	2	35
4	33	1	0	1	35
5	34	0	1	0	35
6	29	0	0	6	35
7	34	0	0	1	35
8	30	1	1	3	35
9	33	0	0	2	35
10	31	2	1	1	35
11	31	0	0	4	35
12	35	0	0	0	35
13	31	1	0	3	35
14	31	1	2	1	35
15	27	1	3	3	35
16	34	0	0	1	35
17	26	0	2	7	35
18	34	0	0	1	35
19	27	4	1	3	35
20	24	2	2	7	35
21	30	4	0	1	35
22	34	0	0	1	35
23	33	0	1	1	35
24	29	1	1	4	35
25	26	2	0	7	35
26	7	6	3	19	35
27	33	0	1	1	35
28	28	1	1	5	35
29	31	0	2	2	35
30	32	0	0	3	35
31	11	16	2	6	35
32	25	4	0	6	35
33	35	0	0	0	35
34	26	4	1	4	35
35	35	0	0	0	35
	1033	53	25	113	1225

4.4.2 Women with high education

The total number of collected tweets from women who were highly educated was 1225. The

analysis of the collected tweets showed that 988 (80.65%) tweets were in SA "High

Variety," whereas only 80 (6.53%) tweets were in DA "Low Variety." The data also showed

that there were 41 (3.35%) tweets that consisted of CS from DA to SA, while 116 (9.47%)

tweets incorporated a CS from SA to DA. Figure 4.5 illustrates use of the collected tweets

Figure 4.5 The Collected Tweets of Women with High Education.

Table 4.7 Numbers of Tweets for Each Twitter Account among Women with High Education.

Accounts	Tweets in H	Tweets in L	CS to H	CS to L	Total
1	32	0	1	2	35
2	34	0	0	1	35
3	24	2	2	7	35
4	30	0	3	2	35
5	35	0	0	0	35
6	29	4	0	2	35
7	35	0	0	0	35
8	35	0	0	0	35
9	29	3	3	5	40
10	35	0	0	0	35
11	25	1	1	8	35
12	35	0	0	0	35
13	25	3	3	4	35
14	35	0	0	0	35
15	35	0	0	0	35
16	35	0	0	0	35
17	26	2	0	7	35
18	16	8	5	6	35
19	34	0	0	1	35
20	33	1	0	1	35
21	22	5	0	8	35
22	16	3	4	7	30
23	34	0	0	1	35
24	23	3	0	9	35
25	10	15	2	8	35
26	21	8	1	5	35
27	17	3	4	11	35
28	9	18	5	3	35
29	33	0	0	2	35
30	31	1	3	0	35
31	34	0	0	1	35
32	24	0	3	8	35
33	35	0	0	0	35
34	32	0	1	2	35
35	30	0	0	5	35
	988	80	41	116	1225

4.4.3 Men with college education

The total number of collected tweets from men who were college educated was 1225. The

analysis of the collected tweets showed that 810 (66.12%) tweets were in SA "High Variety,"

whereas only 180 (14.69%) tweets were in DA "Low Variety." The data also showed that there

were 59 (4.82%) tweets that consisted of CS from DA to SA, while 177 (14.45%) tweets

incorporated a CS from SA to DA. Figure 4.6 illustrates use of the collected tweets.

Figure 4.6 The Collected Tweets of Men with College Education.

Table 4.8 Numbers of Tweets for Each Twitter Account among Men with College Education.

Accounts	Tweets in H	Tweets in L	CS to H	CS to L	Total
1	26	3	1	5	35
2	7	5	6	17	35
3	23	2	0	10	35
4	34	0	0	1	35
5	30	1	0	4	35
6	33	0	0	2	35
7	30	0	1	4	35
8	21	2	3	8	35
9	15	5	6	10	35
10	22	1	3	9	35
11	30	2	1	2	35
12	27	4	1	3	35
13	25	4	5	1	35
14	35	0	0	0	35
15	15	5	1	14	35
16	28	6	0	1	35
17	16	12	3	4	35
18	28	0	1	6	35
19	23	6	1	6	35
20	15	20	0	0	35
21	13	20	0	2	35
22	30	2	1	2	35
23	31	1	1	2	35
24	21	4	2	8	35
25	11	17	1	6	35
26	29	0	4	2	35
27	3	23	6	3	35
28	29	0	2	4	35
29	30	0	0	5	35
30	25	2	1	7	35
31	13	12	2	8	35
32	13	15	1	6	35
33	33	0	0	2	35
34	27	3	2	3	35
35	19	3	3	10	35
	810	180	59	177	1225

4.4.4 Women with college education

The total number of collected tweets from women who were college educated was 1225. The analysis of the collected tweets showed that 740 (60.41%) tweets were in SA "High Variety," whereas only 327 (26.69%) tweets were in DA "Low Variety." The data also showed that there were 47 (3.84%) tweets that consisted of CS from DA to SA, while 111 (9.06%) tweets incorporated a CS from SA to DA. Figure 4.7 illustrates use of the collected tweets.

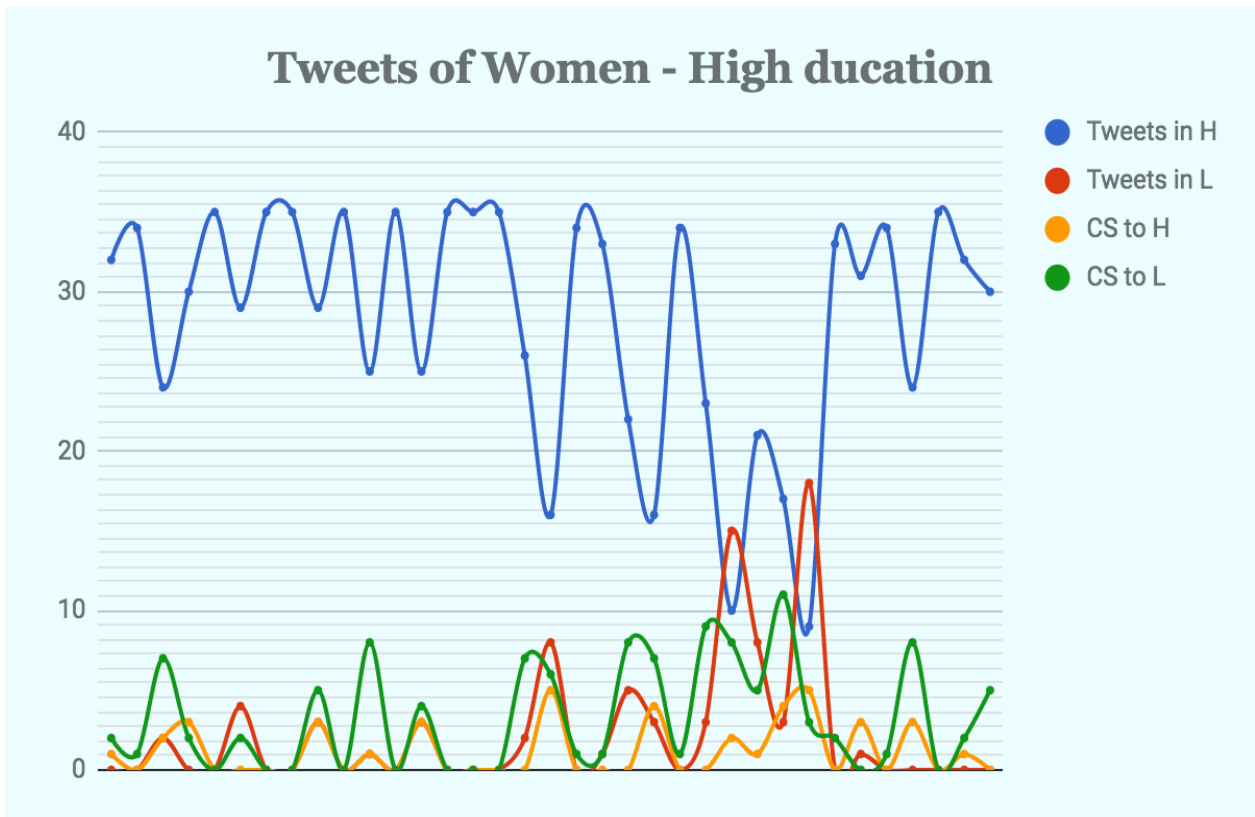Figure 4.7 The Collected Tweets of Women with College Education.

Table 4.9 Numbers of Tweets for Each Twitter Account among Women with College Education.

Accounts	Tweets in H	Tweets in L	CS to H	CS to L	Total
1	18	6	3	8	35
2	32	0	0	3	35
3	5	21	1	8	35
4	28	1	1	5	35
5	20	4	1	10	35
6	25	2	7	1	35
7	32	1	1	1	35
8	33	0	0	2	35
9	34	1	0	0	35
10	22	9	0	4	35
11	11	19	3	2	35
12	19	14	1	1	35
13	26	3	1	5	35
14	10	20	0	5	35
15	25	9	0	1	35
16	6	21	4	4	35
17	21	4	4	6	35
18	24	9	1	1	35
19	6	26	3	0	35
20	25	2	4	4	35
21	26	3	1	5	35
22	2	32	0	1	35
23	18	15	0	2	35
24	28	5	0	2	35
25	31	0	0	4	35
26	29	3	3	0	35
27	12	18	1	4	35
28	27	2	2	4	35
29	6	27	2	0	35
30	33	1	0	1	35
31	33	1	0	1	35
32	31	1	0	3	35
33	11	18	1	5	35
34	13	16	2	4	35
35	18	13	0	4	35
	740	327	47	111	1225

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4.4.5 Men with less than college education

The total number of collected tweets from men who have less than a college education was 1225. The analysis of the collected tweets showed that 458 (37.39%) tweets were in SA "High Variety," whereas only 528 (43.10%) tweets were in DA "Low Variety." The data also showed that there were 70 (5.71%) tweets that consisted of CS from DA to SA, while 169 (13.80%) tweets incorporated a CS from SA to DA. Figure 4.8 illustrates use of the collected tweets.

Figure 4.8 The Collected Tweets of Men with Less than College Education.
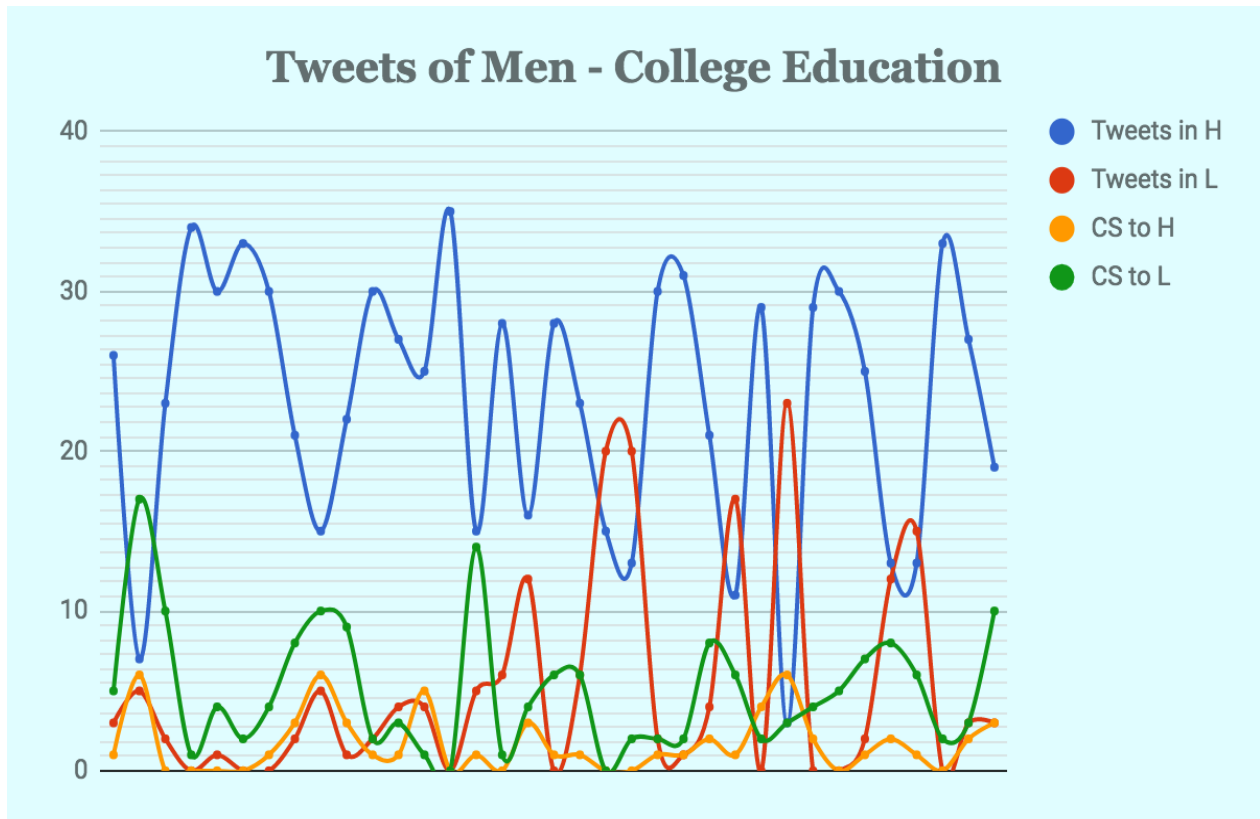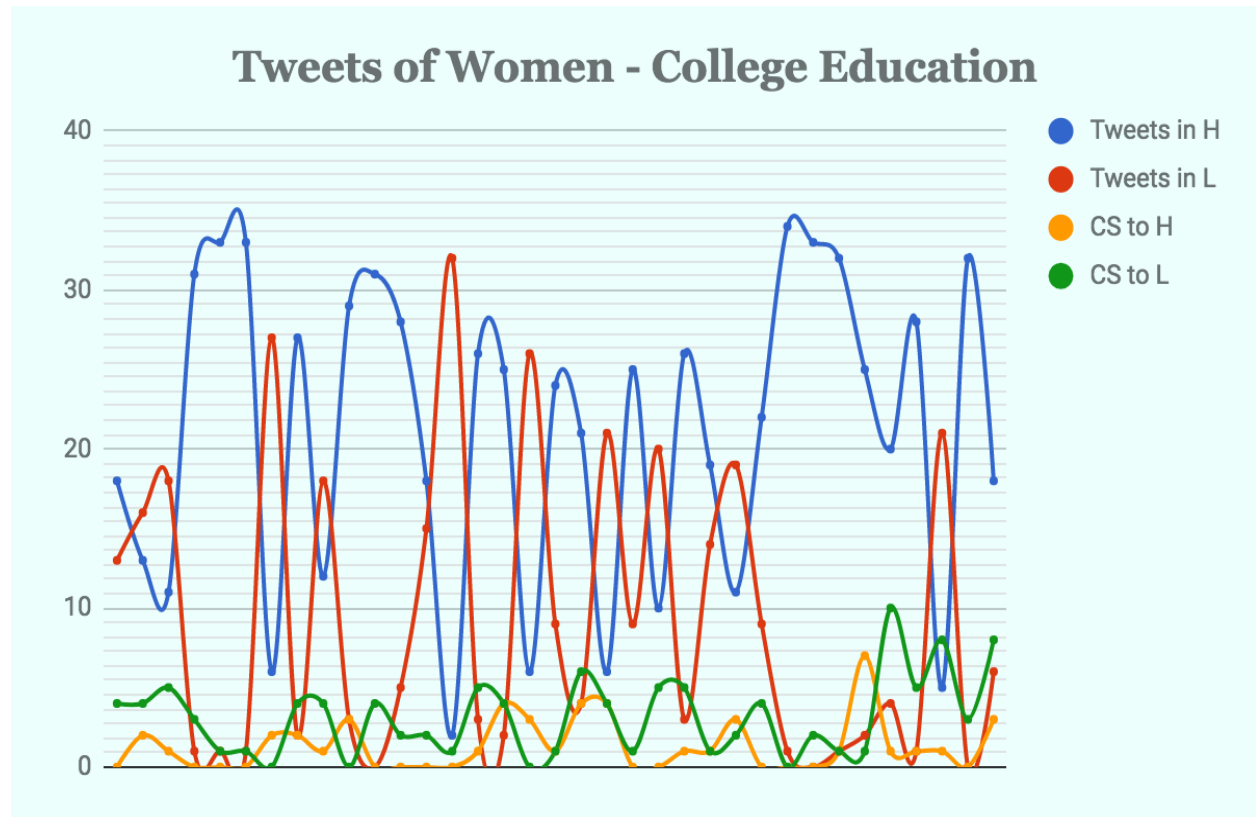
Table 4.10 Numbers of Tweets for Each Twitter Account among Men with Less than College Education.

Accounts	Tweets in H	Tweets in L	CS to H	CS to L	Total
1	7	14	0	14	35
2	20	2	1	12	35
3	31	0	0	4	35
4	27	0	0	8	35
5	17	14	1	3	35
6	31	0	0	4	35
7	3	26	5	1	35
8	28	3	0	4	35
9	24	10	0	1	35
10	24	2	0	9	35
11	3	12	6	14	35
12	30	0	2	3	35
13	5	24	6	0	35
14	33	0	0	2	35
15	3	27	0	5	35
16	10	22	1	2	35
17	12	21	0	2	35
18	30	1	1	3	35
19	17	7	3	8	35
20	9	13	5	8	35
21	3	24	3	5	35
22	8	21	1	5	35
23	12	13	3	7	35
24	10	12	5	8	35
25	1	32	1	1	35
26	0	32	3	0	35
27	7	18	5	5	35
28	0	31	3	1	35
29	0	32	2	1	35
30	26	0	0	9	35
31	15	12	2	6	35
32	0	30	2	3	35
33	5	22	1	7	35
34	1	27	4	3	35
35	6	24	4	1	35
	458	528	70	169	1225

4.4.6 Women with less than college education

The total number of collected tweets from women who have less than a college education was 1225. The analysis of the collected tweets showed that 347 (28.33%) tweets were in SA "High Variety," whereas only 683 (55.76%) tweets were in DA "Low Variety." The data also showed that there were 90 (7.35%) tweets that consisted of CS from DA to SA, while 105 (8.57%) tweets incorporated a CS from SA to DA. Figure 4.9 illustrates use of the collected tweets.

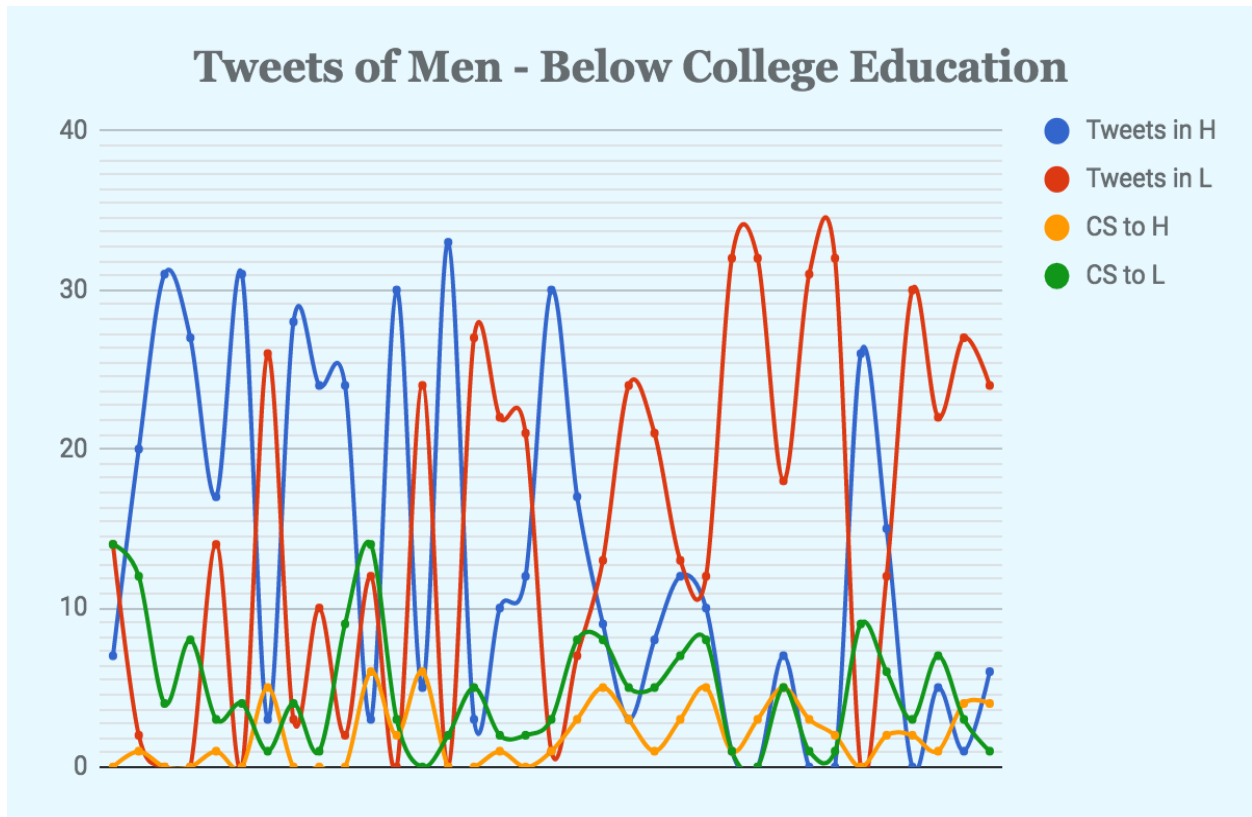Figure 4.9 The Collected Tweets of Women with Less than College Education.
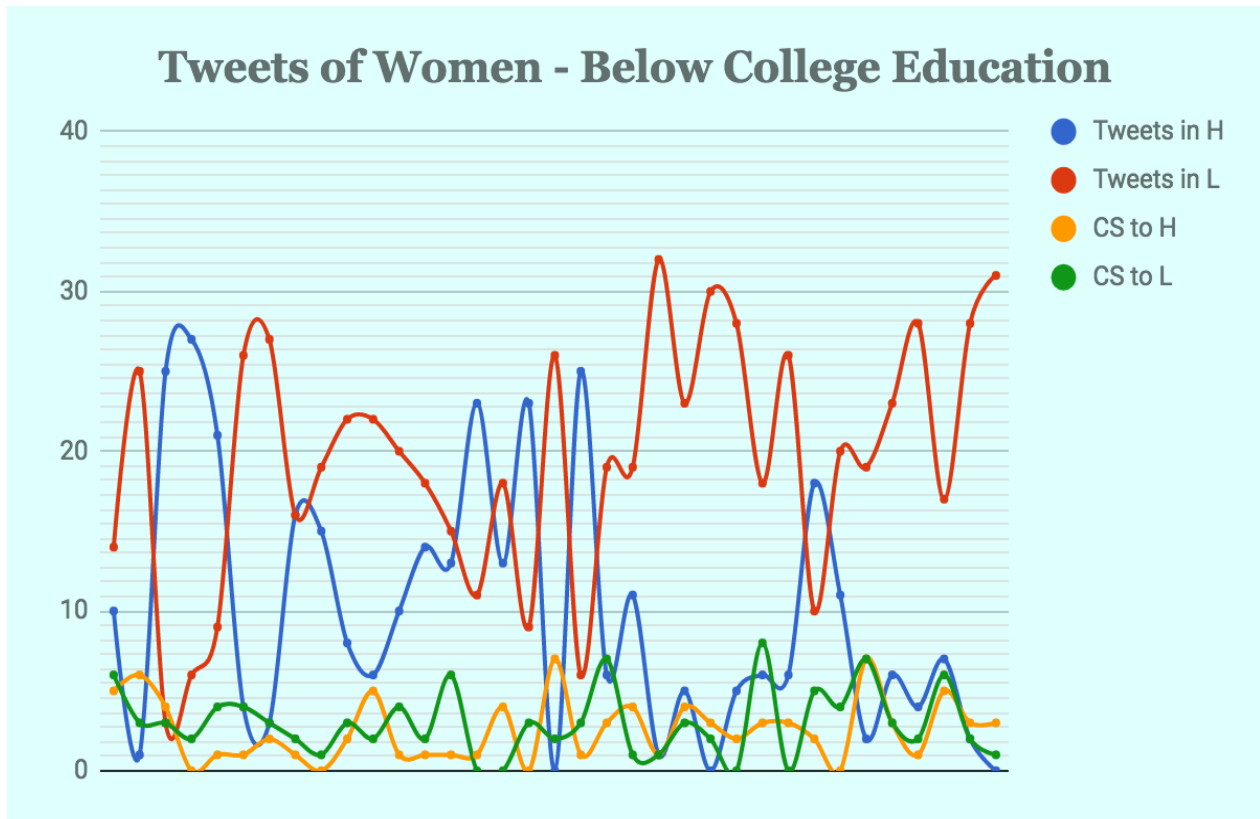
Table 4.11 Numbers of Tweets for Each Twitter Account among Women with Less than College Education.

Accounts	Tweets in H	Tweets in L	CS to H	CS to L	Total
1	10	14	5	6	35
2	1	25	6	3	35
3	25	3	4	3	35
4	27	6	0	2	35
5	21	9	1	4	35
6	4	26	1	4	35
7	3	27	2	3	35
8	16	16	1	2	35
9	15	19	0	1	35
10	8	22	2	3	35
11	6	22	5	2	35
12	10	20	1	4	35
13	14	18	1	2	35
14	13	15	1	6	35
15	23	11	1	0	35
16	13	18	4	0	35
17	23	9	0	3	35
18	0	26	7	2	35
19	25	6	1	3	35
20	6	19	3	7	35
21	11	19	4	1	35
22	1	32	1	1	35
23	5	23	4	3	35
24	0	30	3	2	35
25	5	28	2	0	35
26	6	18	3	8	35
27	6	26	3	0	35
28	18	10	2	5	35
29	11	20	0	4	35
30	2	19	7	7	35
31	6	23	3	3	35
32	4	28	1	2	35
33	7	17	5	6	35
34	2	28	3	2	35
35	0	31	3	1	35
	347	683	90	105	1225

4.5 The Role of Topic on the Patterns of Codeswitching

Since the 7350 analyzed tweets did not cover five identified topics, and since I aimed to examine whether the patterns of CS differed according to topic, I needed to find a way to select tweets based on topics. Therefore, 500 additional tweets were collected. One hundred tweets were extracted from each of five different hashtags that were trending in Saudi Arabia during the period between November 2016 and March 2017. Using the Tweetdeck website (https://tweetdeck.twitter.com/). I searched the hashtags, I went over the hashtag and selected the latest 100 tweets, excluding the tweets that were merely advertisements, links, supplications, quotations, and duplicated tweets. The 100 tweets from each hashtag have been categorized based on whether the tweets were in SA, in the SD, included codeswitching to SA, or contained codeswitching to the SD. The hashtags varied in terms of topics and themes; therefore, the formality and seriousness of the topics varied significantly. Table 4.12 shows the number of tweets in each category.

Table 4.12 The Numbers of the Additional Tweets According to Topic.

Topic	#Tweets in SA	#Tweets in SD	#Tweets have CS to SA	#Tweets have CS to SD	Total
Religious	63	14	8	15	100
Social	37	46	6	11	100
Educational	26	62	3	9	100
Athletic	27	60	1	12	100
Political	72	16	2	10	100

4.5.1 The religious topic

#الهيئه_منع_علي_عام *ʕa:m ʕala: manʕ ʔal-hayʔah* "A year since the suspension of the

Committee [for the Promotion of Virtue and the Prevention of Vice in Saudi Arabia]"

 This is a socio-religious hashtag discussing a highly controversial issue that resulted from the

government's decision to reduce the power of the Committee for the Promotion of Virtue and the

Prevention of Vice, and removed some of its privileges the previous year (2016). According to

BBC News (2016)[11], it is stated that "the Saudi authorities introduced new regulations to curb the

kingdom's notorious religious police force, which is frequently accused of abusing its powers."

A year later, in March 2017, Arab News adopted the opponent of the religious police's

point of view and stated, "A year after curbing its power, the Saudi religious police is deemed

redundant by many."[12] The opponents of the Committee for the Promotion of Virtue and the

Prevention of Vice believe that the Saudi government has made the correct decision. They claim

that the Promotion of Virtue and the Prevention of Vice pries into their personal affairs and that

it is the gathering place of and the official umbrella for fundamentalists. The proponents of the

Promotion of Virtue and the Prevention of Vice, on the other hand, believe that the government

has made a costly and unforgivable mistake because they see the Promotion of Virtue and the

Prevention of Vice as the lifeboat that saved the Saudi society from sinking into immorality. This

hashtag discusses a crucial issue in Saudi society. Accordingly, following the prediction of

Ferguson (1959), I assumed it would use SA to discuss such a significant issue.

However, after analyzing 100 tweets that were extracted randomly from this hashtag, the data

showed that 63% of the tweets were written entirely in SA, which is high percent, while 14%

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[11] http://www.bbc.com/news/world-middle-east-36034807
[12] http://www.arabnews.com/node/1076321/saudi-arabia

142

were written completely in the SD or in the L code. With regard to codeswitching, the data

showed that 8% of the extracted tweets contained CS to SA, while 15% included CS to the SD.

In other words, the findings revealed that both the H code and the L code were used in this

hashtag, and that CS occurred as well. In this hashtag, the H code was the dominant utilized code

and it is the typical code to be used to discuss such socio-religious topic. Tweet 4.50 - Tweet

4.52 illustrate how SA and the SD are used in this topic.

Tweet 4.50

<div dir="rtl">

الحمدلله اني للحين مسلم اذكر قالوا سننسلخ من عقيدتنا ومدري
ايه كنت متوتر مرره بس الحمدلله عدت على خير
#عام_على_منع_الهيئة

</div>

"**I thank God** that I am still a Muslim until now; **I recall that they [the proponents of the religious police] said that we [Saudis] would be disengaged from our faith** and I do not know what else; I was very nervous, but **Praise be to Allah it [the year] passed peacefully**."

The Twitter user in this tweet utilized the SD or the L variety for the purpose of mocking and

insulting the proponents of the religious police because they used to claim that the suspension of

the religious police would empower miscreants, as well as lead to socially immoral behavior.

Thus, the user utilized the L code to mock the proponents' claims and to ridicule their ideas. The

user shifted to the H code or to SA only when using a formulaic expression, which is *ʔalħamdu*

liLaːh "Praise be to Allah."

Tweet 4.51

<div dir="rtl">

#عام_علي_منع_الهييه

لا أحد ينكر وجود الخطأ (فالكمال لله)

لكن ان وجد الخطأ فأنتقد الخطأ والمخطي لا الجهاز بأكمله لأجل (يفضى لك الجو)

</div>

"No one denies the existence of mistakes ([because] perfection is for God only)
But if mistakes occurred, then criticize both mistakes and those who make mistakes not the
entire organization so that the (coast is clear)."

The Twitter user in this tweet utilized SA as excepted because he was commenting on a serious

socio-religious topic. However, the user switched to the L code in order to mock and insult the

opponents of the religious police, who supported the government suspension of the religious

police. He was indirectly accusing them of opposing the religious police due to being

philanderers who willingly supported the government's decision because this decision would

enable them to satisfy their sexual desires, as the 'coast is clear' for them to do so. Thus, the user

shifted to the L code in order to insult and mock the opponents of the religious police.

Tweet 4.52

<div dir="rtl">

#عام_علي_منع_الهييه

كل من هب للدفاع والمطالبة بعودتها .. غداً سوف يتبرأ من تجاوزاتها وينكر دفاعه عنها .. ربعنا ونعرفهم!

</div>

"All of those who moved suddenly to defend [the religious police role] and demand its
return.. tomorrow will disown its transgressions and will deny their defense of it.. They are
our people and we [I] know them well!"

The Twitter user in this tweet also utilized SA to comment on or discuss a serious socio-religious topic, as predicted. The user then shifted to the SD or the L variety in order to mock and insult a group of proponents of the religious police in Saudi Arabia, saying that they were merely a group of hypocrites. In other words, the user accused the proponents of hypocrisy and said that they were merely drummers, as seen in Tweet 4.20, whose job is only to drum up support or applaud the government for any decision it makes. Thus, the L code was used to mock some of the proponents of the religious police who expressed their opinions in newspapers.

4.5.2 The social topic

#الزواج_التقليدي_في_شرايك *ʔiʃra:yik fi z-zawa:dʒi t-taqli:di:* "**What is your opinion about arranged marriage?**"

This is a social hashtag that discusses Saudi people's opinions about arranged marriages in comparison to dating or to marriage based on a love/romantic relationship before becoming engaged or getting married, which is rejected by Saudi society because it violates Saudis' traditions, beliefs, and culture. Following the prediction of Ferguson (1959), I assumed that this hashtag would use both the H and the L variety, since it is a social issue and, therefore, the variety used would depend on the users' perceptions of the issue. However, after analyzing 100 tweets that were extracted randomly from this hashtag, the data showed that 37% of the tweets were written entirely in SA, while 46% were written completely in the SD or in the L code. With regard to codeswitching, the data showed that 6% of the extracted tweets contained CS to SA, while 11% included CS to the SD. In other words, the findings revealed that both the H code and the L code were used with various percentage in this hashtag, with CS also occurring. Tweet 4.53 - Tweet 4.56 are representative examples.

Tweet 4.53

<div dir="rtl">

#شرايك_في_الزواج_التقليدي

هو زواج طويل المدى مبني على قيم واخلاق وقبل ذلك الدين

والطلاق فيه اقل والمحبة فيها فوق ما تتصور

</div>

"#What is your opinion about arranged marriage
It is a long-term marriage built on values and ethics and most important religion; divorce
is [potentially] scarce in it, and affection in it is more than what you imagine."

The Twitter user in this tweet disapproved of the idea of marriage based on a love/romantic relationship before becoming engaged or getting married by citing some positive aspects of arranged marriages. Thus, the user utilized SA because an important and serious social issue was being discussed, and the user was aiming to convince the opponents of arranged marriage about the benefits thereof. The user in this tweet reminded readers about the ethics, traditions, values, and the religion of the society on which arranged marriage is based. Since this is not a personal topic but a social issue, SA is the appropriate code because it is the code that is used to indicate seriousness and importance.

Tweet 4.54

<div dir="rtl">

#شرايك_في_الزواج_التقليدي

😂😂😂 يعني فيه زواج تقليدي وزواج أصلي ؟

طيب مافيه زواج تجاري ؟

يعني نفس مواصفات الأصلي بس سعره معقول !

😂😂😂

</div>

"#What is your opinion about arranged marriage

😊😊😊 It means that there is conventional/traditional marriage and original (genuine) marriage?
OK is not there a commercial marriage?
[I] mean [the commercial marriage] has the same specifications as the original but at a reasonable price!"

The Twitter user in this tweet differed from the user in the previous example because he utilized the SD or the L variety; this was because he was mocking and indirectly criticizing opponents of arranged marriage and the entire concept discussed in the hashtag. He borrowed some terms that were used in automobile repair workshops, such as counterfeit, genuine, and commercial. Moreover, the user is using double entendre; for example, the word *tagli:di:* 'conventional' is close in terms of pronunciation to the word *tagli:d* 'counterfeit' or fake; i.e., something that is not genuine and original. Thus, in the automobile repair workshops in Saudi Arabia, when a car's owner needs to purchase spare parts for his/her car, he/she will hear these three terms *ʔasʕli:* 'genuine' *tidʒa:ri:* 'commercial' and *tagli:d* 'counterfeit' as options from which to choose, and these three options vary in terms of quality and price. However, the user in this tweet utilized the SD or the L code to mock and employ sarcasm, as evidenced by the use of the laughing emoji.

Tweet 4.55

#شرايك_في_الزواج_التقليدي
شوفو بالماضي   ونسبة الطلاق فيه
وشوفو الزواج الحالي   كم نسبة الطلاق فيه

نسبة الطلاق فاقت الأرقام القياسية

"#What is your opinion about arranged marriage?
Look at the past and its divorce rate
And look at marriage at present, how is the divorce rate in it

The divorce rate surpassed the (world) records."

The Twitter user in this tweet compared marriage in the past and at present, and asked his readers to think carefully about the divorce rates in the past and compare them with the present. The divorce rates in Saudi Arabia have recently increased sharply; as Nadeem (2017) wrote in the Gulf News:

> *the number of divorce cases in Saudi Arabia has exponentially increased in recent years. According to Saudi Open Data, 35,000 divorce cases were reported in 2015, and 40,000 in 2016. Experts believe that divorce rates have gone up by around 50 percent this year from last year*[13].

Thus, the Twitter user shifted to SA or the H code to emphasize the seriousness of the issue and to sound the alarm that divorce rates have exceeded the records and have become out of control.

Tweet 4.56

#شرايك_في_الزواج_التقليدي
المرأه أصبحت واعيه لحقوقها الشرعيه و القانونيه
ولها صوت و شخصيه عكس قبل ف زواج الكيندر سبرايز لابد
يتغير

"**#What is your opinion about arranged marriage?**
The woman has become aware of her legitimate and legal rights
and has a voice and a personality unlike before [as the marriage used to be similar to] The Kinder Surprise marriage type must be changed."

---

[13] http://gulfnews.com/news/gulf/saudi-arabia/saudi-divorce-rates-rise-by-50-1.2109098

The Twitter user in this tweet provided a counter argument to the idea of arranged marriage. The user utilized SA to comment on a serious social issue and to explain that women have become more educated and more aware of their legitimate and legal rights; thus, SA was used. The user aimed to convince readers that, in the same way that women have become more educated and more aware of their legitimate and legal rights, they also have the right to reject arranged marriage and support the idea of marriage based on a love/romantic relationship before becoming engaged or getting married. The user shifted to the SD or the L code to evoke strong memories of the younger generation by using a simile. Moreover, the user likened arranged marriage to a 'Kinder Surprise', which is well known to young generations in Saudi Arabia, and contains Kinder chocolate, a surprise, and a game in each egg. Thus, the user implied that arranged marriage was similar to Kinder Eggs in that he/she might be lucky to find a lovely game in a Kinder Egg, but might not. Therefore, arranged marriage is similar to a Kinder Egg in that one might be lucky and find a perfectly matched spouse, or the complete opposite might occur. Thus, the user opposed the idea of arranged marriage, and switched to the L code to mock and make fun of those who support the idea of arranged marriage by using an irony simile from the spoken L variety.

4.5.3 The educational topic

#الجديد_الطلاب_مكافات_تنظيم *tanzˤiːm mukaːfaːt ʔatˤ-tˤulaːbi ʔal-dʒadiːd* **"The new regulations of college students' stipends"**

This is a socio-economic topic concerning college students in Saudi Arabia. As noted above, in Saudi Arabia, university students who attend a public school receive a monthly stipend that varies between SAR 850 and SAR 1000 '$222 - $266' based on students' majors. This hashtag

was trending in Saudi Arabia after some rumors that the Saudi government was planning to introduce new regulations governing students' monthly stipends were leaked. The leaks about the new regulations mentioned that only students with high GPAs who maintained an outstanding status would be the only ones who received a monthly stipend. Following Ferguson's (1959) prediction, this hashtag would be likely to be in SA or the H variety, since it discusses an important and serious issue for college students. However, after analyzing 100 tweets that were extracted randomly from this hashtag, the data showed that 26% of the tweets were written entirely in SA, which is not too high, while 62% were written completely in the SD or in the L code. With regard to codeswitching, the data showed that 3% of the extracted tweets contained CS to SA, while 9% included CS to the SD. In other words, the findings revealed that both the H code and the L code were used in this hashtag, and that CS also occurred. In this hashtag, L code is used more than H code, and this is compatible with the abovementioned findings that Twitter users with below college education use the L variety more than the users with high education, and such hashtag discusses an issue that concerns college students, and the vast majority of the participants in the hashtag are college students. Consequently, the H code was used more unlike what was predicted. The following Tweet 4.57 - Tweet 4.59 demonstrate how SA and the SD are used in this topic.

Tweet 4.57

#تنظيم_مكافات_الطلاب_الجديد
هذا القرار الذي لا نستطيع النظر إليه بإيجابية وهناك الكثير من أساليب التحفيز نستطيع تكريم المتفوق من خلالها.

"This decision is one that cannot be viewed positively, and there are many ways of motivation [through which] we can honor the valedictorian."

The Twitter user in this tweet, as predicted, used SA to comment on a serious socio-educational issue concerning college students in Saudi Arabia. The user utilized the H code to oppose the idea of regulating the college students' monthly stipends. Thus, the user used SA or the H code to take a pedantic stand and to adopt the role of an expert to tell the people who propose such regulations that such a decision cannot be viewed positively in any way. In addition, there are many other ways and methods to honor outstanding students without penalizing other students by deducting from their monthly stipends.

Tweet 4.58

<div dir="rtl">

#تنظيم_مكافات_الطلاب_الجديد عندي فكرة عطوا الطلاب مكافأة وحده بالترم اتوقع تكفي للملازم والكتب ليه الفسق وكل شهر مكافأة😹

</div>

"I have an idea, give the students [each student] only one stipend every semester, I expect it would be enough for [purchasing] study booklets and books. Why is the extravagance and every month a stipend?"

The Twitter user in this tweet utilized the SD or the L variety in a socio-educational topic to mock and indirectly criticize the idea of regulating college students' monthly stipends. The user was a college student who was well aware that she had neither power nor the strength to oppose such regulations if they were issued. Thus, the user used the SD for sarcasm and to mock, as illustrated above in the motivation for CS to the SD.

Tweet 4.59

<div dir="rtl">

#تنظيم_مكافات_الطلاب_الجديد
مخصص سنة لأحد المتبطحين أو المتبطحات في قصورهم
يعادل مكافأة الطلاب جميعاً فلماذا لايخصم منهم

</div>

"One year allowance for one of those who are the idle ones [male or female] **in their palaces is equivalent to all students' stipends, so why their [the idle ones] allowances would not be deducted?**"

The Twitter user in this tweet used SA, as predicted, for a socio-educational topic concerning college students in Saudi Arabia. However, the user shifted to the SD or the L code and inserted two words from the L code, which were *il-mitbaṭṭiḥīn* (male 'prone'), and *il-mitbaṭṭiḥāt* (female 'prone'), to signal semantic significance because using the word 'prone' or 'lying down' to describe someone has a negative pragmatic meaning, which is being dependent and lazy, as well as living off others. In this tweet, the user criticized and insulted some people in Saudi society who are socially privileged and receive money without working. Thus, the user switched to the L code to express her anger and criticism, as well as to insult such privileged, corrupt parasites.

4.5.4 The sport topic

#ارحل_يافيصل_بن_تركي *ʔirḥal ya: faysˤal bin turki:* **"Oh Faisal Bin Turki, leave"**

This is a sport-related hashtag. Using this hashtag, the fans of Al-Nassr, which is one of the most famous soccer clubs in Saudi Arabia, asked the president of the club to resign after losing the final game in the Saudi Crown Prince Cup Final to Al-Ittihad, which is another famous soccer club in Saudi Arabia. Following Ferguson's (1959) prediction, this hashtag should have been in in the L variety because the topic was sport. However, after analyzing 100 tweets that were extracted randomly from this hashtag, the data showed that 27% of the tweets were written

entirely in SA, which is not too high, while 60% were written completely in the SD or in the L

code, which is high and is the typical code to be used to discuss such sport topic. With regard to

codeswitching, the data showed that 1% of the extracted tweets contained CS to SA, while 12%

included CS to the SD. In other words, the findings revealed that both the H code and the L code

were used with different percentages in this hashtag, and CS occurred as well. The following

Tweet 4.60 - Tweet 4.62 show how SA and the SD are used in this topic.

Tweet 4.60

<div dir="rtl">

#ارحل_يافيصل_بن_تركي النصر يحتاج الى فكر جديد لدية
مواهب في جميع الفئات ويحتاج الى رئيس لدية فكر ومال وهذه
غير موجوده في فيصل بن تركي

</div>

"**#Oh, Faisal Bin Turki, leave. Al-Nassr requires new thinking; with talents in all categories and it needs a president who has ideas and money, and these ideas and money] are not visible in Faisal bin Turki.**"

The Twitter user in this tweet aimed to diagnose the problems with the Al-Nassr Saudi Club;

thus, he utilized SA or the H code. The user took a pedantic stand and played the role of expert to

cite the fatal flaws that put the Al-Nassr Club team near the bottom of the list among other Saudi

soccer teams, unlike previously when it was considered to be among the top teams. The user in

this tweet took on the role of an analyst who analyzed the reasons for Al-Nassr Club's failures in

the recent championships; therefore, he used the H code. The user utilized SA in an attempt to

convince the readers that the Al-Nassr Club did not lack talent; rather, it was in dire need of

having clear vision and ideas, which were unfortunately not available in the person of Faisal bin

Turki, the president of the Al-Nassr Club at the time. Thus, the best solution to resolve these fatal

flaws would be for Faisal bin Turki to resign.

Tweet 4.61

<div dir="rtl">

#ارحل_يافيصل_بن_تركي

اخر موسمين مشكلة النصر واضحة هي في الأخطاء الإدارية

وهذه الأخطاء تتكرر و لا تتعلم منها الإدارة

</div>

"**In the last two seasons, Al-Naṣr's problem was clear; it [the problem] is with administrative mistakes, and these mistakes are repeated, and the administration does not learn from them [these mistakes].**"

Similar to the previous tweet, the Twitter user in this tweet aimed to diagnose the defects in the Al-Nassr Saudi Club; thus, he utilized SA or the H code. The user used the H variety to take a pedantic stand and to play the role of an analyst who knew exactly what was at fault with the performance of Al-Nassr Club. While the Twitter user in Tweet 4.60 blamed the fatal flaws in the Al-Nassr Club on not having clear vision and thought at the presidential level, the user in this example attributed the failures to the administrative mistakes that had been committed by the administration at the time; thus, both Twitter users utilized SA to convince their readers about their analyses by using the H code to adopt the roles of experts or analysts.

Tweet 4.62

<div dir="rtl">

هذا الكلام اللي لازم يوصل الاداره

الجميع فقد الثقه فيكم لذلك #ارحل_يافيصل_بن_تركي

</div>

"**These are the words** that must get to the administration [of Al-Naṣr]
Everyone has lost confidence in you so, oh Faisal Bin Turki, leave."

The Twitter user in this tweet used the SD or the L code, as predicted for a sport topic, and then shifted to SA to report an indirect quote. The indirect quote was reported in SA to convey the

serious tone of the message. The message was directed at the administration of the Al-Nassr Club, stating that its fans had lost confidence in the current administration and that the president, Faisal bin Turki, should leave. Thus, the user used SA to report a hypothetical quote that conveyed a serious tone to signify the importance of the quoted message.

4.5.5 The political topic

#ارامكو_بيع_يعارض_الشعب *Ɂaʃ-ʃaʕb yuʕaːridˤ bayʕ Ɂaraːmku:* **"The nation objects to selling ARAMCO"**

This is a socio-political hashtag through which Saudis express their opinions, either for or against significant issues that concern the whole of Saudi society that arose when the Saudi government announced its intention to sell 5% of its giant oil and energy company, Saudi ARAMCO. As Carey, Almashabi and Blas (2016) stated "Saudi Arabia plans to sell a stake 'of less than 5 percent' in the parent of its state-owned oil company, the kingdom's deputy crown prince said, revealing details of a listing that could make it the world's biggest publicly traded firm."[14] This hashtag discusses an important topic for Saudi society because ARAMCO oil company is perceived as the backbone of the economy of Saudi Arabia. Following Ferguson's (1959) prediction, I assumed that this hashtag would use SA or the H variety to discuss such a crucial issue. However, after analyzing 100 tweets that were extracted from this hashtag, the data showed that 72% of the tweets were written entirely in SA, which is a very high percent, 16% were written completely in the SD or the L code, 2% of the extracted tweets contained CS to SA, and 10% included CS to the SD. In other words, the findings revealed that both the H code and the L code were used in this hashtag, and CS occurred as well. In this hashtag, SA or the H

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[14] https://www.bloomberg.com/news/articles/2016-04-01/saudi-arabia-to-sell-stake-in-parent-of-state-oil-giant-by-2018

variety was the dominant code. Since the hashtag discusses a serious issue concerning the whole

Saudi society, SA is the most typical code use. The following Tweet 4.63 - Tweet 4.66

demonstrate how SA and the SD are used in this topic.

Tweet 4.63

<div dir="rtl">

عندما بدأت الدول الاشتراكية خصخصة الملكية العامة ، كانت
الطريقة فاشلة وفاسدة
لإنها تستعمل بطريقة وكأنها ملك خاص
#الشعب_يعارض_بيع_ارامكو

</div>

"When the socialist countries began the privatization of public ownership, it was a failed and corrupt method because it has been used [treated] as if it were a private property.
The nation objects to selling ARAMCO"

The Twitter user in this tweet refuted the idea of selling ARAMCO, which is a crucial socio-

economic topic; therefore, he utilized SA or the H code. The user used the H variety to take a

pedantic stand and to adopt an expert role as he compared the case of the socialist states when

they privatized public ownership to the idea of selling ARAMCO and changing it from

governmental ownership into a private corporation. The user affirmed that such an idea was

wrong because it would lead to failure in exactly the same way as it did in the socialist states. He

justified his point of view by stating that the privatization of ARAMCO would empower the

authorized leaders to treat it and benefit from it in a corrupt manner, as if it were part of their

private property. Thus, the user used the H code to show the seriousness of the issue and to

convince the readers by adopting an expert role in which SA is used.

Tweet 4.64

<div dir="rtl">

في بريطانيا تم الإستفتاء الشعبي لخروج بريطانيا من الاتحاد الأوروبي .. فهل نجد ذلك في فكرة بيع أرامكو ؟ ؟

#الشعب_يعارض_بيع_ارامكو

</div>

In Britain, a referendum has been held for Britain's exit from the European Union .. So can we find it [the referendum] in the idea of selling ARAMCO?
The nation objects to selling ARAMCO

Similarly to the previous Tweet 4.63, the Twitter user in this tweet disagreed with the idea of selling ARAMCO by comparing the processes whereby decisions were made in Britain and in Saudi Arabia. The user pointed out that Britain held a referendum regarding its exit from the European Union; thus, he wondered whether the Saudi government would hold a referendum before selling ARAMCO. The Twitter user used SA, the H code, because this is crucial issue for Saudi society; it signifies the importance of democracy, as well as to highlight the importance of conducting a poll with regard to the sale of ARAMCO, the backbone of the economy of Saudi Arabia, and to empower the citizens to participate and enhance their involvement before such decisions are taken. Therefore, due to the significance of the issue, to adopt the role of an expert and to take a pedantic stand, the user utilized SA in his tweet.

Tweet 4.65

<div dir="rtl">

#الشعب_يعارض_بيع_ارامكو

كانت مبيوعة ورجعنا وشريناها وراح نبيعها ثاني مره.
تخطيط سمردحاوي عجيب..!!

</div>

"# The nation objects to selling ARAMCO

It had been sold, then, we came back and bought it; after that, we will sell it for a second time. What a strange planning!"

In contrast to Tweet 4.63, and Tweet 4.64, the Twitter user in this tweet utilized the SD or the L code because he was mocking and indirectly criticizing the mentality of the planners who suggested the idea of selling ARAMCO. According to the ARAMCO website, "on May 29, 1933, an oil concession agreement is signed between Saudi Arabia and Standard Oil Company of California (SOCAL). Then, on November 8, 1933, a subsidiary company, California Arabian Standard Oil Company (CASOC) is created to manage the concession."[15] In 1980, the Saudi government concluded the purchase of Aramco"[16]. Following this, in 1988, Saudi Arabian Oil Company (Saudi Aramco) was established "to take over all the responsibilities of Aramco."[17] In 2016, the Saudi government announced its intention to sell a stake of less than 5% of ARAMCO. However, the Twitter user in this tweet was indirectly criticizing and mocking the planners' indecision. Consequently, the user invented the word *samardaħa:wi:*, which is a nonsense word that has no meaning. The implication is that, just as the process of purchasing ARAMCO and then selling it seemed to be based on 'strange thinking' and as floundering about in terms of planning, inventing the word *samardaħa:wi:* reflects the planners' floundering about and is therefore in harmony with the idea of selling ARAMCO, as neither the word nor the action makes sense. Thus, the user used the SD or the L code for the purposes of mockery and sarcasm.

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[15] http://www.saudiaramco.com/en/home/about/history/1930s.html
[16] http://www.saudiaramco.com/en/home/about/history/1980s.html
[17] http://www.saudiaramco.com/en/home/about/history/1980s.html

Tweet 4.66

<div dir="rtl">

اجزم بأن هناك ايادي خفية تقف خلف هاشتاق
#الشعب_يعارض_بيع_ارامكو
لماذا أثير هذا الأمر تحديداً ولمصلحة من ، ثقوا في الله ثم في
قيادتكم.

</div>

"I affirm that there are hidden hands behind *hashtag*
#The nation objects to selling ARAMCO
Why this issue has been raised in particular, and for the benefit of whom, believe in Allah 'God'
and then in your leadership."

The Twitter user in this tweet opposed the hashtag itself and voiced suspicions about the identity of those who were behind the hashtag and causing it to trend. The user in this tweet utilized SA or the H variety because conspiracy against their country would be a serious concern for all Saudis citizens. Thus, he adopted the role of an expert by asking the readers who was responsible for this hashtag and why this topic in particular had been trending. Moreover, the user preached to the readers about the importance of trust and confidence in leadership being second to confidence in God. He also indirectly reminded the readers about the importance of listening to and obeying the Imam, 'the ruler', as well as not becoming involved in a conspiracy against the country. Therefore, the user utilized SA in his tweet, but he shifted to the L code by inserting a word from the L variety, which is *hashtag*, for no clear reason except because it is commonly used.

4.6 Conclusion

The current study attempted to investigate the motivations of using CS on Saudi Twitter, and whether they are different from the motivations found in face to face interaction. The study also investigated whether the emerging CS patterns differed by gender, education, and by topic. To

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conduct this study and answer the research questions, 7850 tweets were collected through two

phases. The first phase, 7350 tweets collected between December 2016 and July 2017 from 210

Twitter accounts, as the 210 users divided based on gender and education. Moreover, the users

accounts were categorized into six groups;

1) The first group consisted of 35 accounts for men with high education.

2) The second group contained 35 accounts for women also with high education.

3) The third group consisted of 35 accounts for men with college education.

4) The fourth group consisted of 35 accounts for women with college education.

5) The fifth group consisted of 35 accounts for men with less than college education.

6) The sixth group consisted of 35 accounts for women with less than college education.

The second phase of collecting data was to examine the role of the topic or theme on CS

patterns. To answer this question, 500 additional tweets were collected from different hashtags

that were trending in Saudi Arabia during the period between November 2016 and March 2017.

One hundred tweets were extracted from each of five different hashtags that varied in their

topics; religious, social, educational, athletic, and political topics.

The current study found that Twitter users in Saudi Arabia switched to SA for the

following reasons: (1) to introduce formulaic expressions, (2) to emphasize a point, (3) to quote,

(4) to shift from comic to show seriousness, and (5) to take a pedantic stand. In contrast, the

findings showed that Twitter users in Saudi Arabia switched to the SD for the following reasons:

(1) for a specific intended meaning, (2) for sarcasm and criticism, (3) for quotations, (4) for

exemplifying and simplification, (5) for introducing daily-life saying, (6) for scolding and

personal attack or insulting, and (7) for common usage.

Saudi Twitter community used SA more often, 4376 (60%) of the collected tweets were in SA; they used the SD less often, 1851 (25%) of the collected tweets were in the L code. Nonetheless, in some cases, CS occurred, as the data revealed that Saudi Twitter users switched to SA in 333 (5%) of their tweets, while they switched to the SD in 790 (11%) of their collected tweets.

Men used SA in their tweets more than their female counterparts; men used SA in 2301 (63%) of their tweets, while women used SA in 2075 (56%) of their tweets. In contrast, men used the SD less often than women; as 761 (21%) of the men's tweets were in the SD, while 1090 (30%) of the women's collected tweets were in the SD. Men switched to SA in 154 (4%) of their collected tweets and the SD in 459 (12%). Women, however, switched to SA in 178 (5%) of their collected tweets, while they switched to the SD in 332 (9%). Thus, the current study showed that men use SA more often than women, while women utilized the L code more often than men.

As for education, the data exhibited that Saudi Twitter users with a high education level used SA in 82% of their tweets, which is extremely high, while they utilized the L code in 5% of their tweets, which is extremely low. The data also revealed that Saudi Twitter users with a high education level shifted to SA in only 3% of their tweets, which is extremely low; however, they switched to the SD in 9% of their tweets. Saudi Twitter users with a college education used SA 63% of the time, which is also considered high, while the SD was used in 21% of their collected tweets. The current study also found that Twitter users in Saudi Arabia with a college education shifted to SA in only 4% of their tweets, and they switched to the SD in 12% of their collected tweets. The study also demonstrated that the Saudi Twitter users with less than a college education utilized SA 33% of the time, while they used the SD 49% of the time. The Twitter

users in Saudi Arabia with less than a college education shifted to SA in only 7% of their

collected tweets, while they switched to the SD in 11% of their collected tweets. Consequently,

the current study showed that Saudi Twitter users with a high education level and a college

education maintain SA more than their counterparts with less than a college education. They

utilized SA more often because it is the code that indicates importance, high prestige,

seriousness, and sophistication. However, Twitter users who had less than a college education,

although they are capable of using both codes equally well, used the L variety more than the H

code because the L code indicates unimportance, low prestige, accessibility, and non-

seriousness.

As for the role of the topic, the findings revealed that CS occurs in contexts with various

levels of formality and informality with considerable frequency. Moreover, in the religious

hashtag, in which the H code is the predicted code used, the findings showed that 63% of the

collected tweets used SA, while 14% were in the SD. Codeswitching also occurred in such

hashtags, as the data showed that 8% of the collected tweets contained CS to SA, and 15% of the

collected tweets contained CS to the SD. The collected tweets from the social hashtag

demonstrated that 37% of the collected tweets were in SA, while 46% of the collected tweets

were in the SD. The results also showed that 6% of the collected tweets included CS to SA, and

11% of the collected tweets included CS to the SD. The educational topic hashtag, unlike the

prediction of SA being used as the dominant code, revealed that SA was used in only 26% of the

collected tweets, while the SD was used in 62% of the collected tweets. The athletic topic

hashtag, in which the SD was predicted to be the dominant code, showed that SA was used in

27% of the collected tweets, while 60% of the collected tweets were in the SD. Codeswitching

also occurred; 1% of the collected tweets included CS to SA, and 12% contained CS to the SD.

Lastly, the political topic hashtag, which was predicted to have SA as the dominant code, confirmed the predication, as 72% of the collected tweets were in SA, while 16% of the collected tweets were in the SD. Only 2% of the collected tweets contained CS to SA, while 10% of the collected tweets included CS to the SD. Code choice depends on several factors, including the nature of the context in terms of formality and informality, the tone of the Twitter user toward the issue that is being discussed, the user's stance for addressing his or her followers, how the audience will be involved, the function the user aims to perform, and how that function is linked to either the H variety or the L variety of CS.

CHAPTER 5

Discussion and Conclusion

5.1 Overview

This chapter discusses the findings of the study presented in Chapter 4. Four main issues are

discussed here. These are social motivations for CS to SA, the social motivations for CS to

the SD, the roles of gender and education in CS patterns, and the role of topic in CS patterns.

It aims to answer three research questions, namely:

1. What are the functions of using CS on Saudi Twitter? Are these functions

   different from the functions of CS in face-to-face interactions?

2. Do patterns of CS use differ by gender and education?

3. Do patterns of CS use differ by topic or occasion?

5.2 Social Motivations for CS:

The current study found that Twitter users in Saudi Arabia switched to SA for the five

following social motivations:

1- To introduce formulaic expressions: this motivation for CS was identified in the literature on CS in face-to-face interactions (Albirini, 2010, 2011; Auer, 1998; Bullock and Toribio, 2009; García, 2004; Myers-Scotton, 1997) and on computer-mediated discourse as well (Androutsopoulos, 2007; Palfreyman and al Khalil, 2003; Dorleijn & Nortier, 2009).

2- To emphasize a point: the use of CS to emphasize a point has been found in numerous studies in the literature in face-to-face interactions (for example, Albirini, 2010, 2011; Bentahila, 1983; Eldin, 2014; Grosjean, 1982; Gumperz, 1982; Romaine, 1995). Bhatt and Bolonyai (2011) included this motivation under the principle of PERSPECTIVE.

3- To quote: although Albirini (2010, 2011) distinguished between CS to SA for direct quotes and CS to DA for indirect quotes, the findings of the current study showed that SA and the SD were both used for direct and indirect quotations. As shown in the literature on face-to-face interactions, CS might occur to introduce a quotation (Albirini, 2010, 2011; Auer, 1995; Bentahila, 1983; Grosjean, 1982; Gumperz, 1982; Saeed, 1997; Soliman, 2008, among others). Similarly to the previous motivation "to emphasize a point," Bhatt and Bolonyai (2011) included quotation motivation under the principle of PERSPECTIVE.

4- To shift from comic to serious mode: changing the tone is similar to that which Gumperz (1982) called metaphorical CS, and it has been identified in the literature on CS in face-to-face communication by (Albirini, 2010, 2011; Appel & Muysken, 1987; Auer, 1995; Bhatt and Bolonyai, 2011; Lee, (1981); Li, and Milroy, 1995; Romaine, 1995). It has also been referred to as "the phatic function" in which CS is used to alter

the tone of a conversation (Appel & Muysken, 1987). Bhatt and Bolonyai (2011) included this motivation under the principle of PERSPECTIVE.

5- To take a pedantic stance: the findings of the current study demonstrated that CS to SA might be performed to indicate taking a pedantic stance. In some cases, Twitter users shifted to SA to assume the role of an expert or an analyst when addressing their audience. This motivation for CS can be included under the principle of symbolic domination (power) according to (Bhatt and Bolonyai, 2011; Bolonyai, 2005; Grosjean, 1982; Myers-Scotton, 1988, 1993). "This form of CS may be explained by the fact that SA use in the Arab sociolinguistic context often correlates with education, knowledge, and sophistication" (Albirini, 2010, pp. 122-123).

By contrast, this study found that Twitter users in Saudi Arabia switched to the SD to express the following seven pragmatic meanings:

1- To produce a specific intended meaning: this is when the lexical choice conveys the intended meaning, and CS to convey a specific intended meaning has been identified in the literature in face-to-face interaction (for example, by Appel and Muysken, 1987; Backus, 2001; Bhatt and Bolonyai, 2011; Eldin, 2014; Grosjean, 1982). Appel and Muysken (1987) used a different term, "the referential function," as mentioned in the literature review in this study. This motivation in the current study is identical to the principle of FAITH in Bhatt and Bolonyai (2011, p. 526), who stated that: "[A]ctors code-switch to the language that more faithfully and economically captures the intended conceptual, semantic-pragmatic, often socio-culturally or ideologically grounded, meaning."

2- For purposes of sarcasm and criticism: the findings of the current study revealed that CS to the SD was used for mocking, joking, and sarcasm, and to provide underhand or underlying criticism of a person, an idea, or a social issue. The data showed that the SD or the L variety was utilized for humor, as it is not usually appropriate to use SA to make jokes. In some cases, as in examples (24) – (27), a switch to the L variety is a way of criticizing or refuting political or social issues without facing the potential consequences, since SA is correlated with importance and seriousness. Switching from CS to the L code for purposes of sarcasm, mocking, and criticism was reported by Albirini (2010, 2011, 2016), and Saeed (1997). Bhatt and Bolonyai (2011) included this motivation under the principle of PERSPECTIVE. It should be stated here that SA could be used for joking and sarcasm in some SA quotes, but my data did not support this by providing examples.

3- For quotations: the findings of the current study showed that quoting was common in both directions of CS, from SA to the SD and vice versa, regardless of whether the quotes were direct or indirect. Albirini (2010, 2011) distinguished between direct quotes in which the CS was from the L variety to the H variety, whereas indirect quoting involved a CS from the H variety to the L variety. However, the current study did not differentiate between direct and indirect quotes because both were found to be used in both directions, as shown above in examples (8, 9, and 10), and as shown in examples (28, 29, and 30) in Chapter 4. Similar to Saeed (1997, pp. 134-135), the data also revealed that there were two types of quotes: authentic quotes, which were really said or written by someone, and hypothetical quotes in which the Twitter user made up a quote to indicate what the imaginary conversation partner would have said

regarding the topic or issue under discussion. Furthermore, the findings of the current study supported Saeed's (1997), and Albirini's (2010, 2011) findings in which they pointed out that the L variety was generally utilized for sarcasm and mocking or for hypothetical quoting to downgrade and discuss that which one perceived as negative or with which one did not agree. Example (26) in Chapter 4 shows a hypothetical quotation that is compatible with Saeed's (1997) findings, in that speakers used the H variety to upgrade and for that with which they agreed and considered to be positive, whereas they utilized the L variety for that with which they disagreed and perceived as negative. Quotation as a motivation for CS was identified by (Albirini, 2010,2011; Auer, 1995; Bentahila, 1983; Grosjean 1982; Gumperz, 1982; Saeed 1997; Soliman, 2008, among others). Bhatt and Bolonyai (2011) included quotation motivation under the principle of PERSPECTIVE.

4- For exemplification and simplification: Saeed (1997, pp. 127-134) pointed out that, in his data, there were two types of examples of explanations, namely genuine examples and hypothetical examples. According to Saeed, speakers usually tended to use the L variety in the hypothetical examples; by contrast, they utilized SA or the H variety in the genuine examples. Moreover, he stated that the genuine examples were usually in SA to explain and clarify the point with which the speaker agreed and supported. On the other hand, the speaker utilized the L variety or dialectal Arabic to explain an idea or an issue with which the speaker him- or herself disagreed or opposed. Thus, Saeed (1997) found that SA was utilized to upgrade, whereas the dialectal or L variety was utilized to downgrade. However, the current study found that the L variety was utilized to exemplify and simplify regardless of whether the example were genuine or

hypothetical. Exemplifying as a motivation for CS was identified by (Albirini, 2010,2011; Auer, 1995; Gumperz, 1982; Lin, 1996; Romaine 1995; Saeed 1997, Zentella, 1997; among others). Bhatt and Bolonyai (2011) included simplification motivation under the principle of PERSPECTIVE.

5- To introduce everyday sayings: switching to the L code to introduce common sayings, proverbs, and folk sayings was found to concretize, contrast, or elaborate on a certain idea or concept, and this motivation can also be seen in Albirini (2010, 2011).

6- To scold, to make a personal attack, or to insult: this has also been identified in the literature on CS in face-to-face communication, as in (Albirini, 2010, 2011, 2016; Chung, 2006; Myers-Scotton, 1982, Saeed 1997). The L variety is considered the appropriate variety to use to insult and make personal attacks because it is associated with low-prestige topics. This was also supported by Saeed (1997), who stated that the L variety was often associated with discussions of that with which one disagreed or perceived as negative. Thus, the SD is used to downgrade.

7- For common usage: Saeed (1997, p. 197) listed such switches under the functions that he called the 'miscellaneous' category. He stated that the occurrence of such switches could be explained plausibly, and should not be considered to be or treated as genuine CS; instead, they might occur as a result of a slip of the tongue, fossilization, or even tiredness, particularly as he found them to occur at the end of presentations in his data. However, such an explanation is not applicable to the current cases because the data in this study were written; thus, the claim of a slip of the tongue is not valid. Fossilization was also rejected because such switches occurred even among highly

educated people. Tiredness was also rejected as an explanation because the data in the current study consisted of tweets, and writing a tweet of only 140 characters would not be an exhausting or difficult operation. Therefore, the most reasonable motivation for such switches in Tweet 4.37 - Tweet 4.40 in Chapter 4 is that they are commonly used on a daily basis in spoken language and, due to such intensive usage, they are inserted in the midst of tweets that are otherwise written entirely in SA.

On the whole, the current study concurred with Saeed (1997) and Albirini (2010, 2011, 2016), to some extent, in that the motivations for CS to SA were correlated with prestige, importance, and seriousness. By contrast, the SD or the L variety was associated with sarcasm, informality, low-prestige, and simple, everyday topics. The findings of the current study showed that the CS that occurred in written form appeared to resemble the CS that occurs at the oral level, and that it was motivated by motivations that are similar to those of oral CS to some extent. Nevertheless, some differences were found; the current study assumed that these were the result of the different channels of spoken and written language.

Another finding of the present study is the detection of some overlapping functions of SA and the SD. The data revealed that some supplications and prayers that had been assumed to occur in SA alone also occurred in CS to the SD, as in Tweet 4.47 - Tweet 4.49 in Chapter 4, reseated below as Tweet 5.1 - Tweet 5.3.

Tweet 5.1

يارب كما بلغتني رمضان ، بلغني يوم التخرج ، و
يوم الوظيفه و كل الايام الحلوه اللي توني ما
وصلت لها 😢💙

2:31 AM - 30 May 2017

"**O Lord! As You made me reach Ramadan, make me reach the graduation day, the**

employment day, and every other sweet day that I haven't reached yet!"

Tweet 5.2

اللهم اني اسئلك باسمك الأعظم ووجهك الكريم
اللذي لا يسئل به الا الجنه انك تخليني اعديه 💔)"

4:27 PM - 16 May 2017

"**O Allah, verily I beseech You in Your greatest name and most gracious "honorable" face,**

in which one shouldn't beseech you for anything except for heaven, that you make me pass it

[the exam]."

Tweet 5.3

يارب اني اصحى على اخبار حلوه نفس الي في
بالي يارب بشرني بصباح حلو نفس الي ابغاه 🥀
💔.

1:58 PM - 17 May 2017

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"**Oh Lord, make me wake up on** the exact good news that I have in mind. O God give me good tidings of the exact sweet morning that I want."

Similarly to Albirini (2016), the current study also found some overlapping functions of SA and the SD in some tweets, as Tweet 5.1 - Tweet 5.3 show that the Twitter users shifted to the SD in supplications and prayers because it is not usually appropriate to use the L variety for prayers and supplications. However, such overlapping has been found in only five tweets (1%) of the tweets that contained CS to SD. These tweets contained CS to the SD among one group only, women with less than college education, and represent only 1% of the tweets that contained CS to SD. It might be argued that such switching could be subsumed under the motivation of "common usage", but CS for common usage is apparently not applicable to Tweet 5.1 – Tweet 5.3. As it has been shown above, CS for common usage is merely a single word that has been inserted into a tweet that was entirely written in SA. It also has been shown that CS for common usage occurred in two main types: (1) insertion of the SD or the L variety occurred with demonstrative pronouns, future markers, relative pronouns, and negation as demonstrated in Tweet 4.37 – Tweet 4.40; (2) insertion of Twitter-related terms as shown in Tweet 4.44 – 4.46. However, CS in Tweet 5.1 – Tweet 5.3 occurred not only with a single word, but with a phrase or a clause.

Having stated that, two possible justifications could account for such an overlap between the functions of SA and the functions of the SD in CS where SD should not be used; the first is due to a lack of linguistic competence, and this interpretation could be supported by the obvious spelling mistakes in the original tweets. The following words have been misspelled in Tweet 5.1 (presented below along with their corrected forms):

(√) الأيام	→	(x) الإيام	
(√) الوظيفة	→	(x) الوظيفه	
(√) الحلوة	→	(x) الحلوه	

In Tweet 5.2, the misspelled words the misspelled words (along with the corrections are as follows):

(√) أسألك	→	(x) اسئلك	
(√) الذي	→	(x) اللذي	
(√) يُسأل	→	(x) يسئل	
(√) الجنة	→	(x) الجنه	

In Tweet 5.3, the misspelled words (along with the corrections are as follows):

(√) إني	→	(x) اني	
(√) أَصحى	→	(x) اصحى	
(√) أَخبار	→	(x) اخبار	
(√) حلوة	→	(x) حلوه	
(√) أَبغاه	→	(x) ابغاه	

The second interpretation is that such CS to the L variety conforms the findings regarding gender as a social variable with regard to language use. Thus, Tweet 5.1, Tweet 5.2 and Tweet 5.3, which were written by two different women with less than college education, are compatible with the mainstream impression that women tend to use the supradialectal more often than do

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men. The term supradialectal resembles the prestigious variety that (Abdulaziz, 1986) called it "urban cultivated Arabic," "inter-regional standard" (Ibrahim, 1986) and what (Walters, 1996) termed "Elevated Tunisian Arabic" and all of these terms refer to the variety in the middle between SA and local low dialects.

Among the most obvious differences in the CS motivations in written versus face-to-face interaction is the absence of some motivations that were identified in the literature concerning social motivations for CS in face-to-face interactions, including "to provide reiterations" (Auer, 1995) and (Gumperz, 1982), "to add interjections" (Gumperz, 1982) and (Saeed, 1997), "to gain the floor" (Bentahila, 1983), "to function as a sentence filler" (Albirini, 2010, 2011); (Auer, 1995); (Grosjean, 1982); and (Romaine, 1995), "to produce rhyming stretches of discourse" (Albirini, 2010, 2011), and "to indicate pan-Arab or Muslim identity" (Albirini, 2010, 2011). However, in written form, there is apparently no need for CS to function as a sentence filler due to the likelihood that the writer has time to think and reconsider; therefore, CS on Twitter is a conscious process, and therefore, a corrected form, whereas language production is a subconscious process in face-to-face interactions. Another difference is that CS in face-to-face communication can be used "to induce parenthetical phrases" (Albirini, 2010, p. 125, 2011, p. 547); and (Grosjean, 1982). However, this motivation did not exist in the current study, most likely because Twitter was limited to 140 characters when I collected my data, which precludes digressions and circumlocutions. On the other hand, new patterns of CS emerged, which were CS for common usage because the user used Twitter-related terms such as hashtags, retweets, and blocks rather than their equivalents in SA, in addition to the insertion of single words from the L code; in particular, future markers, relative pronouns, demonstrative pronouns, and negation in the L code were found inserted in the midst of a tweet that was otherwise written

entirely in SA. Such insertions had no clear motivations except for common usage in daily conversations and, as a result of this popularity, have crept into the written form of SA. The common usage motivation, particularly regarding Twitter-related terms, might have occurred as a result of not knowing their equivalents in SA. If this was the case, this motivation has been identified in the literature in different terms, such as "some Facebookers lack functional knowledge of Arabic" (Albirini, 2016), "the referential function of CS" that occurs due to a lack of facility or lack of knowledge in one of the two languages concerning a certain topic or subject (Appel & Muysken, 1987), and "lack of register" (Eldin, 2014) and (Hussein, 1999).

With regard to language use in social media, the findings of the current study indicated that Saudi Twitter community used SA in 60% of their tweets whereas the SD was used in 25% of their tweets. Therefore, the present study contradicted Al-Tamimi and Gorgis's (2007) work, in which they argued that the majority of their participants were found to use a new variety that could be described as hybrid lingua franca or even a pidgin as well as the findings of Abu Elhij'a (2012) who introduced *ʔal-ʕaːmmiyyah ʔal-ʔilikturuːniyyah* "Electronic Dialectal." This contradiction might be explained by the nature of their data, as participants in Al-Tamimi and Gorgis's (2007), and Abu Elhij'a's (2012) were young Arabic speakers. Therefore, their findings cannot be generalized to include all speakers of communities or users of social media because they included only a specific age range. Al-Tamimi and Gorgis's (2007), and Abu Elhij'a's (2012) excluded middle-aged participants and old participants. Nevertheless, the findings of the current study are in support Al-Tamimi and Gorgis's (2007), and Abu Elhij'a's (2012) findings in terms of Twitter users with less than college education. In other words, the current study found that users with less than college education utilized the SD more than SA, as they used the SD 49% of the time, while they used SA in 33%, which is still not a very low rate, of their tweets.

Furthermore, Saudi Twitter users with less than college education in the current study seemed to tend to use the L variety in a manner that was congruous with the casual nature of on-line interaction and in order to remain in-group or to employ the WE code, as Gumperz (1982) claimed. By contrast, the Twitter users in the present study who were not young were found to use SA more often than the SD because it has been shown that SA is correlated with prestige, importance, and seriousness; thus, using the SD subverts the prestige of SA (Palfreyman & al Khalil, 2003).

5.3 The Role of Gender and Education in Codeswitching Patterns

After analyzing 7350 tweets, the findings revealed that the Saudi Twitter community used SA in their tweets 4376 times (60%), which is a high percentage. The SD was used in 1851 (25%) of their tweets, which is low in comparison with use of SA. With regard to CS, the data revealed that Saudis often maintained SA in their tweets; they used the SD less often. Nonetheless, they switched between SA and the SD in some cases. Moreover, the data showed that only 333 (5%) of the collected tweets included CS to SA, while 790 (11%) of the collected tweets contained CS to the SD. Thus, the findings demonstrated that the H variety or SA was the dominant code and the default variety for use on Twitter, otherwise known as the matrix or base variety.

Upon further examining the data in depth in terms of the role of gender and education as social variables in CS patterns, the data revealed that men with high levels of education used SA 84% of the time, which is a very high in comparison to the utilization of the SD 4% of the time, which is extremely low. The data also showed that 2% of their tweets contained CS from the SD to SA, while 9% of their tweets incorporated a CS from SA to the SD. In comparison, women with high levels of education used SA in 80% of their tweets, while they used the SD in 6% of their tweets. The data also showed that 3.35% of the tweets by women with high education

contained CS from DA to SA, while 9.47% tweets incorporated a CS from SA to DA. For these users, SA was deemed the appropriate choice because it is the language of education and prestige. The data indicated that the social motivation "to take a pedantic stance" for CS was found almost exclusively among highly educated users, regardless of gender. The motivation of playing the role of expert and taking a pedantic stand could arise from the desire of the highly educated to play the role of expert and demonstrate social distance. The findings also demonstrated that men with a college education utilized SA 66% of the time, while they used the SD in 14% of their tweets. The data also revealed that 4.82% of the tweets contained CS from DA to SA, while 14.45% of the tweets incorporated a CS from SA to DA. When we compared men with a college education to women with a college education, the current study's findings revealed that women with a college education used SA in 60% of their tweets, while they used the SD 26% of the time. The data also displayed that there were 3.84% of the tweets that contained CS from DA to SA, whereas 9.06% of the tweets incorporated a CS from SA to DA. With regard to gender and low levels of education, the findings showed that men with less than a college education used SA in 37% of their tweets. By contrast, they used the SD 43% of the time. The data also exhibited that 5.71% of the tweets by men with less than a college education contained CS from DA to SA, while 13.80% of their tweets incorporated a CS from SA to DA. Women with less than a college education, on the other hand, utilized SA in 28% of their tweets, while they used the SD 55% of the time. The data also presented that there were 7.35% of their tweets incorporated a CS from DA to SA, whereas 8.57% of the tweets by women with less than college education contained a CS from SA to DA. If we compare Twitter use in terms of gender alone, the findings showed that men used SA more often than women did. Men utilized SA in

63% of their tweets, while they used the SD in 21% of their tweets. Women, on the other hand, used SA 56% of the time, whereas they used the SD in 30% of their tweets.

With regard to the role of education alone, the current study revealed that Saudis with high levels of education utilized SA in 82% of their tweets, while they used the SD in 5% of their tweets. By contrast, the findings showed that SA was used 63% of the time by Saudis with a college education, whereas they utilized the SD 21% of the time. The data also demonstrated that the Saudis with less than a college education used SA in 33% of their tweets, while they used the SD 49% of the time. Thus, the data revealed three major findings:

1. Saudi Twitter users utilize SA more than they did the SD.

2. With regard to gender as a social variable, the current study revealed that men utilized SA more than women did.

3. With regard to education as a social variable, the current study revealed that Saudi Twitter users with high levels of education and a college education used SA more regularly than did their counterparts with less than a college education.

With regard to gender as a social variable, gender is a controversial issue for Western researchers such as Labov (1972) and Trudgill (1974), who posited that women tended to be more conservative than were men, and preferred to use more standard and prestigious forms of language. Nonetheless, Labov (1982) claimed that, in the Near East and in South Asia, women are not necessarily more conservative than are men. In reality, in the Arab world that is rich in dialects and varieties in addition to SA, the prestigious variety is not necessarily identical to SA; they are two different concepts as the prestigious variety is in the middle between SA and the local low varieties (Abd-El-Jawad, 1987; Ibrahim, 1986; Walters, 1996). These authors claimed that Labov might not have considered the difference between a prestige variety and a standard

one. However, the current study supported the findings of Eckert (1989), Ibrahim (1986), Abd-El-Jawad (1987), Badawi (1973), Haeri (1996a), Al-Essa (2009), and al-Rojaie (2013). The findings revealed that gender as a social variable in the Saudi Twitter community conformed to the conclusions reached by Schmidt (1974), Ibrahim (1986), Abd-El-Jawad (1987), Badawi (1973), Haeri (1996a), Walters (1996), Al-Essa (2009), and al-Rojaie (2013), who found that, in urban areas of the Arabic-speaking world, women tended to prefer the supradialectal varieties, which is the Saudi dialect in the current study. However, in Saudi Arabia, the notion of the prestigious variety does not seem to be present in the literature. There are several dialects in Saudi Arabia, such as the Ḥijāzi dialect, the Najdī dialect, the Janūbī "Southern" dialect, and the Eastern or "Gulf" dialect, among others, and each dialect has its own distinct features. In addition to the local dialect, there is a common variety that can be called "Saudi Koine" or a supradialectal variety. This "Koine" requires further investigation and study because of the abundance of some local dialect features, such as *kaskasah,* and *kaʃkaʃah* which are not standard Arabic. I argue that this "Koine" was formed and formulated via dialectal contact in schools and universities, and was promoted or enhanced by media, particularly television shows. Moreover, the current study found that local dialectal variations, such as *kaʃkaʃah*, *kaskasah*, and the definite article *-ʔim* instead of *-ʔal*, among other local variations, have been abandoned, and the supradialectal variations have been used instead. In other words, speakers in Saudi society have adopted /k/ instead of the local variation /-ts/ and /ʃ/, as supported by Al-Essa (2009) and al-Rojaie (2013). According to Al-Essa (2009), old Najdī women who moved to Ḥijāz used local dialectal features such as /ts/ instead of /k/ and /dz/ rather than /g/ because of their lack of access to the dominant spoken variety, while younger female participants used the Ḥijāzī variation /k/, which conforms to the Saudi supradialectal and to SA, rather than the Najdī variation /ts/.

Similarly, in the current study, women had access to the supradialectal, which is the Saudi dialect. It could be said that the Saudi dialect is the prestigious variety because it is midway between the local dialects and SA. This middle variety or the supradialect variety differs from one country in the Arab world to another. The middle variety, the supradialectal variety, or the Saudi dialect (different names to refer to the same thing) emerged due to the dialectal contact of members of the society originating from different regions and provinces in working environments, and in universities in addition to some other social factors. These movements resulted in dialectal contact and, as a result of this contact, the Saudi dialect has evolved to satisfy communicative needs and has been used as an effective and versatile means of communication among Saudis from different region and provinces. It has also enabled Saudis to avoid using their own very low local dialectal variations; it has been posited that some Saudis might attempt to avoid being stigmatized due to their dialectal features.

In Saudi Arabia, the segregation of men and women is one of the defining features of Saudi society. Gender segregation is particularly seen in schools, universities, hospitals and first-aid centers; for example, banks have separate entrances for men and women One might accordingly predict that women in Saudi Arabia would use SA more than men would, not because they felt socially and psychologically less secure, but to maintain distance due to the nature of the social traditions and the social norms of cross-gender communication in Saudi society. The claim that women use the standard variety more than men do, as argued by Labov (1972) and by Trudgill (1974), as a result of feeling socially and psychologically less secure than men. This does not seem to be applicable to women in Saudi society due to the social norms and traditional values that restrict the social interaction between unrelated men and women. Such social contact is considered unacceptable behavior to some extent, particularly if it is not work or

family related or there is nothing to necessitate such communication. However, the findings demonstrated the opposite prediction. By combining gender and education, the current study revealed that women used SA less often than men did, which is in agreement with the findings of Badawi (1973) and Haeri (1996a), namely that women with the same level of education as men used SA less often than men did.

With regard to education as a social variable alone, the current study found that education did not differ from gender in terms of the disagreement regarding its role in language use, and was thus a controversial issue. Ferguson (1959) emphasized the role of education, as he attributed the acquisition of SA to formal education, while the L variety is the mother tongue for native speakers of Arabic and is the language usually spoken in the home and everyday conversation. Badawi (1973), who identified five levels of Arabic, based these five levels on education as well as on social class, with the fifth variety in particular (the colloquial of illiterates) being spoken by or associated with the lower classes or with people who have no or very little education. Unlike Badawi and Ferguson, Al-Wer (2009) posited that education causes the language to change in the opposite direction from SA. She argued that education, particularly higher education, led the language change in the Middle East. She justified this by saying that it was common for students in the Middle East who want to study at colleges to leave their hometowns and villages and move to urban areas and cities where they encounter different linguistic backgrounds and dialectal variations. Due to such movements, college students are exposed to new social traditions, values, and dialectal variations and, as a result, students with higher education lead language change in the opposite direction from the standard language. Therefore, highly educated speakers are usually more linguistically innovative and less conservative.

However, the current study found that the Saudi Twitter community members who had high levels of education or a college education utilized SA more than they did the SD. There might be other variables impacting code choice here in addition to education. For example, Al-Wer (2002; as cited in Al-Wer, 2009) downplayed the influence of education, but stated that it might function as "a proxy variable" that could act on behalf of other less obvious independent variables (p. 633). In the current study, it should be noted that education was not the main factor in code choice. Moreover, Table 4.6 in Chapter 4, which includes the number of tweets for each male participant with high education, revealed that accounts number (26) and (31) did not use SA in the same manner as their counterparts in the Table 4.6 did. Similarly, Table 4.7 in the Chapter 4, which shows the numbers of tweets for each Twitter account belonging to women with high levels of education, revealed that accounts (25) and (28) also did not use SA in the same manner as their counterparts did. Due to this inconsistency, I attempted to find a reason for the contradiction, and the social factor of age was a possible explanation, although the current study did not consider age among the social variables. In other words, the four users (26 and 31 in Table 4.6, and 25 and 28 in Table 4.7 in Chapter 4) were still in their early thirties or late twenties, which means that they were close in age to the last group, namely the Twitter account users with less than a college education. By contrast, the current study found that users with less than a college education generally utilized the SD more than they did SA, but by looking at each user account separately in Table 4.10 in Chapter 4, the account numbers (3), (4), (6), (8), (12), (14), (18), and (30) were found to use SA more frequently than did their counterparts in the same group, which means there was another factor apart from education. Thus, age might be as an important factor as education, and the current study should have considered age in addition to gender and education.

5.4 The Role of Topics on the Patterns of Codeswitching

The third research question that the current study sought to answer is: how CS patterns would differ according to the topic? The current study assumed that the Saudi community of Twitter users would conform to Ferguson's (1959) context-based model, in which he associated code choice with the topic and situation. If the context is formal, such as formal education, sermons in mosques and churches, newspapers, and news, for example, then SA would be the appropriate code or variety to use. If the context is informal, on the other hand, the L code or variety would be the appropriate variety to use. Another view on the same topic is Bassiouney's (2006) argument that the social motivations for code-switching are merely the speaker himself/herself who selects the code and decides which code is most appropriate for a given conversation. Such contextual polarization and distinction between the H and L varieties and confining each of them to specific functions and specific daily use has been refuted or contradicted in other studies, such as Blanc (1960), Badawi (1973), Meiseles (1980), Mahmoud (1986), Ryding (1991), Boussofara-Omar (2006), and Albirini (2010), among others, who are proponents of the claim that there is an intermediate variety between the H code and the L code. Similarly, the current study contradicted Ferguson (1959), and supported the claims of Badawi (1973), Meiseles (1980), Mahmoud (1986), Ryding (1991), Boussofara- Omar (2006), and Albirini (2010), among others. The findings demonstrated that CS occurred in the most formal context, which was the religious context, as well as in informal contexts, related to soccer; with different percentages, as the findings revealed.

With regard to the religious hashtag (A year since the suspension of the Committee [for the Promotion of Virtue and the Prevention of Vice in Saudi Arabia]), it was assumed that SA would be utilized 100% of the time, based on Ferguson's (1959) model. However, this study's

findings showed that 63% of the tweets were written entirely in SA, which is a high percent

nevertheless, while 14% were written completely in the SD or in the L code. With regard to

codeswitching, the findings showed that 8% of the extracted tweets contained CS to SA, while

15% included CS to the SD. In other words, the findings revealed that both the H code and the L

code were used in this socio-religious hashtag, and that CS also occurred. In this hashtag, it is

obvious that the H code was the dominant code that was used, and it is the typical code that is

used when discussing socio-religious topics. Although this finding contradicted Ferguson's

(1959) context-based model, it supported the work of Saeed (1997), Bassiouney (2006), Soliman

(2008), and Albirini (2010, 2011), who posited that the code choice did not depend solely on the

formality or informality of the context, and "this means that even in religious discourse, which is

the most formal form of discourse, DA may occur if such functions as joking, simplifying,

exemplifying, and scolding, are invoked" (Albirini, 2010, p. 166). Accordingly, CS to the SD

occurred in such formal socio-religious topics to perform various functions such joking,

simplifying, scolding, and mocking, as examples (Tweet 4.50), (Tweet 4.51), and (Tweet 4.52)

in Chapter 4 illustrated.

Sport discourse is the antithesis of the most formal discourse, the religious discourse, and

this topic revealed use of SA and CS to SA, which was not predicted by Ferguson (1959). In the

soccer or sport-related hashtag (Oh Faisal Bin Turki, leave), as shown in the findings, SA was

used 27% of the time in contrast to 60% of the tweets that were in the SD, which means that the

L code was the dominant code in this sporting topic. Although the utilization of the SD in the

soccer-related hashtag was the dominant variety, the findings revealed that SA was also utilized

to perform some functions such as taking a pedantic stance and to adopt the role of the expert in

such discourse, as examples (Tweet 4.60) and (Tweet 4.61) in Chapter 4 illustrated, as well as to

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indicate seriousness, as in example (Tweet 4.62). This is in agreement with Saeed (1997), who

pointed out that SA is usually used to upgrade, and that speakers usually use SA when discussing

that with which they agree and consider positive; this motivation is comparable to adopting a

serious tone, as in Albirini (2010, 2011), and this motivation can also be included under the

principle of PERSPECTIVE (Bhatt & Bolonyai, 2011).

With regard to the socio-political hashtag "The nation objects to selling ARAMCO," the

findings demonstrated that 72% of the tweets utilized SA, which is a high percentage, and

indicate that SA was the dominant variety in this socio-political discourse, while 16% of the

tweets were in the SD, which is in comparison a low percentage. This hashtag discussed an

important topic for Saudi society, since the ARAMCO Oil Company is perceived as being the

backbone of the Saudi Arabian economy. It was assumed that this hashtag would use SA or the

H variety to discuss such a crucial issue, based on Ferguson's (1959) prediction. Although the

findings confirmed the assumption regarding the use of SA to some extent, the SD was also

utilized as 16% of the tweets were written completely in the SD. Codeswitching also occurred as

2% of the extracted tweets contained CS to SA, and 10% included CS to the SD. SA was utilized

as predicted because the topic was serious, and in order to take a pedantic stance or the expert

role, as seen in examples (Tweet 4.63) and (Tweet 4.64) in Chapter 4, as these functions are

associated with SA. However, contrary to the predictions, the L code was also used in order to

perform specific functions such as sarcasm and mocking, as (Tweet 4.65) in Chapter 4

demonstrated, and this function is in agreement with Saeed (1997), who found that the L code

was usually employed to downgrade, and to discuss that with which one disagrees or perceives

as negative. Codeswitching to the L code for mocking, sarcasm or for underhand criticism was

also identified by Albirini (2010, p. 133; 2011) under the motivation of "to mark a shift in tone

from serious to comic." This motivation can also be included under the principle of PERSPECTIVE (Bhatt & Bolonyai, 2011).

Similarly, for the educational topic "The new regulating of college students' stipends," it was assumed that SA would be used in this education-related hashtag according to Ferguson's (1959) prediction. However, the findings demonstrated the antithesis of this prediction, as only 26% of the tweets were written entirely in SA, which is not a particularly high percentage, while 62% were written completely in the SD or in the L code. In this hashtag, the L code was the dominant code, contrary to the predictions. As the L code was used more often than was H code, this is compatible with the abovementioned findings that Twitter users with less than a college education used the L variety more often than users with a high level of education did; because the hashtag discussed an issue that concerned college students, the vast majority of the participants discussing the hashtag were college students. Consequently, the L code was used more often, contrary to the prediction. Moreover, this supports the arguments of Saeed (1997), Soliman (2008), and Albirini (2010, 2011), in that CS occurs in the formal context as well as in the informal context to perform specific social pragmatic meanings such as mocking, sarcasm or underhand criticism, as (Tweet 4.58) and (Tweet 4.59) in Chapter 4 demonstrated. Such findings also confirmed Saeed's (1997) result, namely that the L code is usually employed for downgrading and for that with which one disagrees and perceives as negative, as well as for mocking, sarcasm or underhand criticism (Albirini, 2010, 2011). This motivation can also be included under the principle of PERSPECTIVE (Bhatt & Bolonyai, 2011).

As for the social topic "What is your opinion about arranged marriage?," it was assumed that both the H and the L variety would be used because is the topic was a social issue; thus, the variety used would depend on the users' perceptions of the issue. This assumption was

confirmed, as the findings revealed that 37% of the tweets were written entirely in SA, while

46% were written completely in the SD or in the L code; accordingly, it was not possible

determine the dominant code. This confirms that CS occurs to convey specific pragmatic

meanings and, in this socially related hashtag, it was found to be compatible with Saeed's (1997)

view, as he posited that speakers used the H variety to upgrade and that with which they agreed

and considered to be positive, whereas they use the L variety to downgrade and for that with

which they disagreed and perceived as negative. In such hashtags, and when discussing social

topics, the account users positioned themselves either for or against, and this correspond to what

(Bhatt & Bolonyai 2011) subsumed under the principle of PERSPECTIVE when they wrote:

"Actors switch to a language that is best positioned to signal what is assumed to be currently

salient point of view and socio-cognitive orientation in discourse" (p. 533). Furthermore,

example (Tweet 4.53) in Chapter 4 was in SA and example (Tweet 4.55) included CS to SA to

indicate seriousness and importance, and to allow the participants to position themselves as

proponents of traditional or arranged marriage; thus, SA was the appropriate code to use. By

contrast, example (Tweet 4.54) in Chapter 4, in which the Twitter user used the SD to mock and

criticize the opponents of arranged marriage, the user used the SD to downgrade and for that

with which he disagreed and perceived as negative. The same principle is also applicable in

example (Tweet 4.56) in Chapter 4, as the Twitter user switched to the SD to criticize and mock

the idea of arranged marriage, shifting to the L code to downgrade and for that with which she

disagreed with and perceived as negative.

Thus, it can be stated that the findings are congruent with (Albirini's 2010, 2011);

(Bassiouney's 2006); (Saeed's 1997); and (Soliman's 2008) findings in that CS occurs in

contexts with various levels of formality and informality with considerable frequency. Thus,

code choice depends on the combination of several factors, including the nature of the context in terms of formality and informality, the attitude of the Twitter users towards the issue that is being discussed, and his/her stance or perception of his/her followers and audience and how they will be involved, as well as the function that the user aims to perform and how it is linked to either the H variety or to the L variety. The findings of the current study contradict Ferguson's (1959) and Hudson (2002) in which the main constraint is situational context as well as Bassiouney (2006, p. 234), who claimed that the code utilized was chosen by the speaker regardless of other factors that might control code choice, such as topic, situation, and audience. It might also be the case that Egyptian dialectal and standard use is unique, as Egyptian speakers seem to mix between SA and Egyptian Colloquial Arabic (ECA) depending on the social hierarchy and educational background of the speaker (Badawi 1973), or the speaker's choice (Bassiouney 2006), regardless of other factors that might affect code choice, such as topic, situation, and audience.

5.5 Conclusion

In summary, the current study investigated the social motivations of CS involving SA and the SD on Twitter. It aimed to explore new horizons of language use that has not received much attention. Language use on social media needs a close examination, particularly in its written form, as it could be argued that a new type of language is being formed and formulated on social media and, according to some researchers such as Al-Tamimi and Gorgis (2007), and Abu Elhij'a (2012), a hybrid variety of written and spoken language is being observed and formulated on social media particularly, in its written form.

The current study sought to investigate CS patterns on Twitter and how these patterns would differ from the motivations that have already been identified in face-to-face interactions. It

also intended to explore two of the most frequently investigated social variables in the sociolinguistic literature, which are gender and education, and whether CS patterns would differ according to these variables. The last research question that this study aimed to investigate was the role of topic on CS patterns. It attempted to explore whether CS patterns would differ according to the topic being discussed.

To answer the research questions, data were collected from Twitter in two stages. In the first stage, in order to explore the social motivations for CS in the written form and to compare them to the motivations in oral communication as well as to explore the role of gender and education on CS patterns, a total of 7350 tweets were collected from 210 Twitter accounts of various users with different genders and levels of education. The 210 Twitter accounts were categorized according to six groups, (35 accounts for each group), based on gender and education, namely

1- men with high education,

2- women with high education,

3- men with college education,

4- women with college education,

5- men with less than a college education, and

6- women with less than a college education.

In the second stage, in order to explore the role of topic in CS patterns, an additional 500 tweets were collected from five different hashtags that were trending in Saudi Arabia between November 2016 and March 2017. The five hashtags discussed typical Saudi issues in various domains, including religious, social, educational, sport, and political topics and domains.

The findings revealed that SA was correlated with prestige, importance, sophistication, and seriousness. The current study found that Twitter users in Saudi Arabia switched to SA for the following reasons:

1- to introduce formulaic expressions,

2- to emphasize a point,

3- to quote,

4- to shift from the comic to the serious, and

5- to take a pedantic stance.

By contrast, the SD or the L variety was associated with sarcasm, informality, and low-prestige, simple, everyday topics. The study found that Twitter users in Saudi Arabia switched to the SD for the following reasons:

1- for a specific intended meaning,

2- to express sarcasm and criticism,

3- for quotations,

4- for exemplification and simplification,

5- to introduce everyday sayings,

6- for scolding and personal attacks or insults, and

7- for common usage.

The current study would predict that there would be some differences in the CS motivations in written from CS in face-to-face interactions due to the difference in the channels. Moreover, some motivations that were identified in the literature regarding social motivations for CS in face-to-face interactions included "to provide reiterations," "to add interjections," "to gain the floor," "to function as a sentence filler," "to produce rhyming stretches of discourse," and "to

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indicate pan-Arab or Muslim identity" (Albirini, 2010, 2011; Bentahila, 1983; Gumperz, 1982; Romaine, 1995; Saeed, 1997), but these could not be found in the data in the current study. The absence of such motivations could be attributed to the nature of the written form of language that enables writers to think and reconsider their written output. Consequently, CS is a conscious process, whereas language production is a subconscious process in face-to-face interactions. Another justification for the absence of such motivations could be attributed to the nature of Twitter's policy to limit tweets to 140 characters at the time at which I collected my data, which precludes digressions and circumlocutions. On the other hand, new patterns of CS emerged, such as CS for common usage because users used Twitter-related terms such as hashtags, retweets, and blocks rather than their equivalents in SA.

With regard to the role of gender and education in CS patterns, the current study found that the Saudi Twitter community utilized SA notably more than they did the SD, and codeswitched less frequently to either SA or the SD. The current study also found that men utilized SA more often than did women, which is in line with the findings of some studies that explored gender variables in the Arab world, such as the works of Ibrahim (1986) and Abd-El-Jawad (1987), as women tend to use the supradialectal, which is in between local dialectal varieties and SA. With regard to education, the current study found that Twitter users with high levels of education or a college education used SA more often than did their counterparts with less than a college education. In reality, education alone was found to be insufficient to justify or explain the code choice, and other social variables, particularly age, should be considered in conjunction with education.

With regard to the role of topic in CS patterns, the current study would predict that the Saudi community of Twitter of speakers would conform to Ferguson's (1959) context-based

model, in which he associated code choice with a given topic and situation. If the context were formal, SA would be the appropriate code or variety to use. If the context were informal, on the other hand, the L code or variety would be the appropriate variety to use. The current study found that the use of the L code and CS occurred in the most formal topic, which was the religious domain. Where use of the H code was observed, CS also occurred in informal contexts such as the sport domain, which means that Ferguson's (1959) context-based model was inaccurate. Thus, the use of either SA or the L code depended mainly on the function that one aims to perform and its correlation with either the H code or with the L code.

5.5.1 Implications

As mentioned above, the present study revealed three major findings:

1. Saudi Twitter users utilized SA more than they did the SD

2. Regarding gender, the current study revealed that men utilized SA more than women did

3. As for education, the current study revealed that Saudi Twitter users with high levels of education and a college education used SA more regularly than did their counterparts with less than a college education.

Thus, the findings imply that the functions and motivations for CS differ from one community to another in agreement with Appel and Muysken (1987), who posited that the functions of CS vary from one community of speakers to another speech community' for example, "Puerto Ricans in New York may code switch for very different reasons than the Flemish in Brussels" (p. 120). Similarly, in the Arabic world, the functions and motivations for CS in Egypt, as an example, may not be necessarily identical to the functions for CS in Morocco or any other Arab country

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because every community differs from others in terms of its social variables, linguistic attitudes, perceptions, and language policies.

The H variety and the L variety are functionally asymmetrical and, as the findings revealed, bidialectal users attributed each variety to its appropriate status and prestige in contexts that varied in terms of formality and informality. The H code is correlated with importance, seriousness, sophistication, and prestige, while the L code for associated with sarcasm, informality, low-prestige, and simple language. Thus, Ferguson's (1959) model did not provide an accurate description of the nature of Arabic use. In addition, the middle variety should receive more attention and investigation to compare and contrast the middle variety of Arabic across the Arabic world, as it seems to differ from one Arabic country to another.

With regard to implications for the field of teaching Arabic as a foreign/second language, the present study revealed that SA was the dominant code used on Twitter although, as it is a social media platform, the L code was expected to be the dominant code, as Al-Tamimi and Gorgis (2007), and Abu Elhij'a (2012) claimed. Consequently, as it has been shown that SA is not an "artificial language" that native speakers of Arabic do not use for daily-life situations, Arabic instructors, curriculum designers and developers, and academic institutes should focus more on teaching SA rather than distracting Arabic learners by focusing on teaching them dialects because dialects are changeable, and are not as stable as SA. In addition, SA is commonly intelligible across the Arabic world, whereas, learning dialects usually confines the learners to communicating only with the speakers of that specific dialect.

With regard to teaching Arabic in the Arabic world for the speakers of Arabic, and in Saudi Arabia in particular, the teachers, curriculum developers and designers, and language planners have to consider students' exposure to more SA inputs at schools and to observe their

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performances in Arabic classes. Their language production and proficiency based on written and spoken output should then be observed longitudinally, and language policies should be developed and modified accordingly. In addition, teaching grammar in isolation is insufficient to promote their proficiency in SA; thus, it seems that more practice is needed to help those with less education to improve their writing and speaking skills.

5.5.2 Limitations

The most important limitation of the current study was identifying the Twitter users' accounts because not all Twitter users use or disclose their real names, and identification with regard to gender, education, age, and the province or the region of residency. Therefore, to overcome these limitations, I employed the following techniques:

1. I selected Twitter accounts of people whom I knew personally.
2. I asked some of my friends and family to provide me with Twitter accounts including some details about the accounts, particularly the facts about the user of the Twitter account, such as gender and level of education.
3. I used the website https://followerwonk.com/bio as a secondary source for Twitter accounts. Nonetheless, the Twitter accounts that I selected via https://followerwonk.com/bio still constitute a limitation because I was unable to verify the account holders' true identities, and was reliant on the information that they provided in their biographies.

Finally, the lack of a conventionalized writing system for colloquial varieties might have impacted the findings especially with respect to the dominant use of SA, although this may be more relevant to phonological features than other aspects of Arabic.

5.5.3 Further research

In reality, there are several directions for future research. The first suggestion for future research is to replicate the current study for two main reasons: the first is that Twitter changed its policy in November 2017 and increased the number of letters and characters in each tweet to 280 rather than 140. Such changes to Twitter's limited number of letters and characters in tweets might impact the social motivations for CS and code choice. The second reason is that age should be considered as a social variable in addition to gender and education. Although it is difficult to consider the ages of users due to social norms and traditions, particularly with regard to the opposite gender, it is not impossible. Furthermore, it is crucial to study the use of SA and the DA across different Arabic-speaking countries, and on different social media platforms such as Twitter, Facebook, whatsApp, and Snapchat, among others.

Similar future research studies should consider including follow-up oral interviews with samples of Twitter users (twitters and hashtagers in this case) to probe, among others, their perceptions about functions and use of CS. This would be helpful in further confirming the findings.

In future research, there should be investigations into the overlapping of the functions of SA and the L code. Social variables and language competence must be considered during such studies in order to draw a clear conclusion on why overlapping occurs and in which contexts it occurs most frequently.

Future research should also consider examining the attitudes towards CS in both directions and the use of the SD on social media. Bentahila (1983) claimed that bilinguals generally have negative attitudes towards code-switching; therefore, a possible question is whether the same attitudes towards CS could be seen in Saudi society. In addition to language

attitudes towards the use of SA and the SD on social media, a longitudinal study of Saudi society's attitudes and perceptions of language use and code choice on social media could prove fruitful, particularly with regard to whether language is used as written or a spoken language or as a hybrid of both. In other words, would computer-mediated discourse be considered as speech, writing, or a hybrid of both?

For future research, the Saudi dialect in general needs more studies to provide descriptive accounts of its structures and functions, as it is apparently considered the supradialectal. It resembles what is called "urban cultivated Arabic" (Abdulaziz, 1986), "inter-regional standard" (Ibrahim, 1986) and what Walters (1996) termed "Elevated Tunisian Arabic." It is the intermediate variety between SA and the local regional dialects.

Finally, future research should investigate the influence of social media on Arabic in general considering more social variables such as gender, education, age, and social class among others. Due to the extensive use of emojis, for example, in some tweets, the entire tweet consisted solely of emojis. This means that emojis are being used as expressive symbols and could be described as a new form of language that is being shaped. It is interesting that emojis have become a universal language, and seem to have the same meanings and convey the same expressions across languages and cultures.

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