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## **Language Choice in Mobile Text Messages among Jordanian University Students**

### **Abstract**

This paper examines the linguistic structure and sociolinguistic functions of Arabic-English code-switching in mobile text messages as used by a group of Jordanian university students. It also aims at investigating the distribution of the switched elements by syntactic category. The corpus was collected from 46 male and female undergraduate and post-graduate students. Qualitative as well as quantitative analyses were carried out by the researchers. The major findings of the study revealed that there are a number of technical elements that might be responsible for the wide use of English or switching between English and Arabic “with Arabic Roman scripts” in mobile text messaging. Qualitative data analysis indicated that CS could be brought about and shaped by the dynamics of the relationship of the speaker–addressee and by cultural features embedded in the Arabic language. The analysis also showed that CS in this particular means of communication functions as a communicative strategy for facilitating communication by lowering language barriers as well as by consolidating cultural identity. Moreover, it has been noticed that the process appears to be conditioned, among other factors, by the sex of the writer. The findings of this study chart changes in language choice practices ushered in by the advent of a new medium of communication.

### **1. Introduction and background**

#### **1.1 Preliminaries**

Mobile technology has spread rapidly throughout the world faster than any other communication technology, and is now widely used everywhere. The basic concept of mobile phones began in 1947 when researchers started developing car phones, but it was not until around 1982 that mobile phones, as we know them, were first used. The Short Message Service (SMS) was developed within the mobile phone industry in the early 1990's but it did not become popular until about 1998 (Crystal 2001).

SMS, as defined within the GSM digital mobile phone standard, is a service which enables its users to send short text messages from one mobile phone to another, or to a mobile phone via the Internet (Hard af Segerstad 2002: 187). Communication through SMS service is one mode of communication referred to as *computer mediated communication* (CMC). CMC is divided into two types: first, the synchronous CMC, whereby the communication occurs “in real time” (Crystal 2001: 11), such as Real Time Chat and Internet Relay Chat (IRC). The second type is asynchronous CMC, whereby communication occurs “in postponed time” (Crystal 2001: 11) such as SMS and e-mails. This latter type does not require the participants to be online and available at the same time or place in order to receive and send messages (Hard af Segerstad 2002; Baron et al. 2005; December 2005; Goggin 2004).

The mobile did not immediately become “a device for the masses”, and it was not widely spread in Jordan until the end of 1990’s. Within a span of 10 years, from 1991 to 2003, the mobile telephony has moved from being the technology for a privileged few to essentially a mainstream technology (Castelles et al. 2006).

## 1.2 Review of related literature

The emergence of CMC has motivated a real dichotomy among researchers as whether to consider CMC as a written or spoken form of language. While Baron (2000: 248) gives a metaphor to CMC as “an emerging language centaur, part speech, part writing”, Crystal (2001) suggests that CMC is more than just a hybrid of speech and writing. He assumes that although CMC displays properties of both mediums, it holds features that neither one of these mediums have. Crystal suggests that it must be seen as a new species of communication and he calls it a “third medium”. Moreover, a number of scholars (e.g., Androutsopoulos 2006; Siebenhaar 2006; Yeh 2004; Sue 2003; Lobet-Maris 2003; Puro 2003; Lin 2000) show how the new technology has immediate linguistic consequences. Crystal (2001) contends that the technical restriction of 160 characters per message has motivated the use of new forms of language, such as the use of short forms that basically have two types: acronyms and abbreviations. Speaking of the effect of computer-mediated communication on language use, Warschauer et al. (2002) argue that one important and the most feared consequence of the use of new technology is the global use of English to such a degree that it would replace other languages. To deal with this

problem, speakers of other languages have developed new forms of writing which adapt to their languages using the Roman scripts (Warschauer et al. 2002).

In a number of previous works (e.g., Blom & Gumperz 1972; Castells et al. 2006; Sue 2003) it has been observed that in certain situations, English is used alternatively with other languages in what is known as “code-switching” (Myers-Scotton 1993). Grosjean (1982: 145) defines code-switching as “the alternate use of two or more languages in the same utterance or conversation”. Some scholars differentiate between two types of mixed discourse: “code-switching” and “code-mixing” (Auer 1999; Kachru 1978; 1983). Myers-Scotton (1993: 85), who introduces the Compliment Phrase (CP) as the unit of analysis, notes that a number of scholars, notably Kachru (1978; 1983), make this terminological distinction, but she considers the term “code-mixing” not to be terribly useful and instead prefers to use intra-CP versus inter-CP code-switching (CS). Myers-Scotton (1993) objects to the use of the term “code-mixing” because it implies CS is unconstrained and lacks structure. She (1998) argues that because the CP can be defined more precisely than either the sentence or the clause, it is the best unit for discussing the grammatical structuring of CS.

Though many authors have dealt with the processes of code-switching, code-mixing and borrowing, not all of them have provided clear-cut distinctions for such phenomena (Romaine 1989; Myers-Scotton 1990; 1993; Poplack 1988). Code-switching and borrowing are explained (Halmari 1997: 17–18; Pahta 2004: 79) as a continuum in progression in which code-switching precedes borrowing in time and is more restricted in its use (individual vs. societal). In Pahta’s (2004: 79) words: “The distinction between the two may seem straightforward in theory: switching involves the use of two languages in one utterance, whereas the term ‘borrowing’ is used of embedded elements that have been integrated into the host language” (reported in Crespo & Moskowich, 2006: 51). Since this paper deals with language choice in mobile text messaging, we will adopt the term “code-switching” as an umbrella term to refer to any occurrence of alternating between Arabic and English.

Previous research (e.g., Castells et al. 2006; Bautista 1999; 2004; Sue 2003; Myer-Scotton 1993) has named common factors that affect an individual’s reasoning for code-switching. Among these are: 1) environmental settings, 2) audience, 3) conversations with embarrassing or

uncomfortable topics, and 4) picking up “cues” from others that serve as an invitation to speak both languages (reported in Benitez 2008).

Functional studies of CS have focused on the reasons why bilingual speakers do engage in CS, in describing the social context in which such utterances are produced, the social functions they attempt to serve, and the sociolinguistic factors triggering this kind of behavior (e.g., Chung 2006; Castells et al. 2006; Sue 2003; Al-Khatib & Farghal 1999; Auer 1999; Adendorff 1996; Myers-Scotton 1995; 1998; Mustafa & Al-Khatib 1994; Gumperz & Hernandez-Chaves 1978). Nowadays, with the emergence of new techniques of communication such as the Internet and mobile phones, studies of CS have shifted their attention to investigate how the process occurs through these new media of communication (e.g., Benitez 2008; Castells et al. 2006; Sue 2003; Paolillo 1996; Baron 2000; Durham 2003; Kung 2004).

As far as the Arab World is concerned, there has also been some interest in studying CS in CMC. In Egypt, Warschauer et al. (2002), for example, examine the use of English and Arabic in online communication by a group of young professionals. The study indicates that English is used predominantly in web use and in formal e-mail communication, whereas a Romanized version of Egyptian Arabic is used extensively in informal e-mail and online chats. They ascribe the anticipated results to four factors: “general dominance of English in the professional milieu, lack of Arabic software standards, computer and internet use learned in English environments and early adopters’ fluency in English”. Similarly, another study on the ASCII-ized Arabic (AA), (i.e., a form of language in which ASCII “American Standard Code for Information Interchange” symbols are used to represent Arabic in Instant Messaging (IM) and other electronic written communication), was carried out by Palfreyman and al Khalil (2003). The corpus shows that “approximately” 25% of participants use mainly Arabic script in IM, 25% AA, and 50% English. As Palfreyman and al Khalil put it “in the present corpus there was a fair amount of code-switching (changing mid-utterance or mid-sentence from one language to another) and code-mixing (using words or phrases from one language within sentences in the other language).” This mixing of varieties correlates with different functions and topics, with Arabic being used for more formulaic phrases such as greeting, and English for topics such as university courses.

## 2. The current study

### 2.1 Objectives and scope of the study

Although previous studies have looked at different sociolinguistic aspects of text messaging, little work has been done on mobile phones and code-switching, especially when used for text messaging. Because code-switching in mobile text messaging tends to be more conscious than code-switching in speech, code-switching in this particular means of communication is expected to bring about a new functional distribution between English and Arabic. This study investigates language choice in mobile text messages among Jordanian university students from a sociolinguistic perspective. Specifically, an attempt will be made in this investigation to see what linguistic choices are available to students when writing their text messages. It also seeks to answer the following questions: How frequently are English and Arabic used in mobile text messages? What technical elements may contribute to facilitate or hinder the process of switching between these two languages? What communicative functions are performed by switching to either code? To what extent does the sex of the speaker affect language choice? And finally, to see whether SMS has any effect on the type of syntactic patterns employed by the students, we will try to examine the distribution of the switched items in the collected data by syntactic category. The underlying hypothesis is that the students' writing will display social functions similar to those found in oral code-switching research, given that this type of text serves as a means of interaction among bilingual university students.

### 2.2 Methodology and the corpus

The corpus of this study was collected from 46 students studying at different Jordanian universities: Jordan University, Yarmouk University, University of Science and Technology and Petra University. There were 17 males and 29 females ranging in age from 17 to 26 years. The sample composed of 39 undergraduate and 7 graduate students, all of whom are native speakers of Arabic. But it should be noted here that due to their educational background, all of the subjects have learned English as a

foreign language and use the language as a medium of instruction in their universities.<sup>1</sup>

In an attempt to better understand the nature of the text messages and their contents the text-building mechanisms were analyzed and interpreted in relation to the sociocultural background of the message writers. Unless the scripts cannot be deciphered, they will be presented to the readers of this paper exactly as written by the students.

From the outset, we intended to use messages written by both male and female students, in order to examine the effect of gender on the type of strategies used. A total of 403 messages were collected from the participants. More than 150 messages were eliminated from the corpus for various technical reasons. Also, to have a nearly equal number of messages from both sex groups, only 100 messages were randomly selected from those provided by female students. Because females were more cooperative than males, they provided us with twice as many messages as males. In total 181 messages were used for the purpose of this investigation; 100 written by females and 81 by males. All names and any other information that may identify the participants' identity were removed.

Furthermore, a mixed method approach to data collection was employed using both a self-report questionnaire and key informant interviews. The questionnaire was fashioned after that used by Warschauer et al. (2002). However, the questionnaire was modified in a way so as to

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<sup>1</sup> During the second half of the twentieth century, the explosion in business and communications technology has revolutionized the field of teaching English as a second language, in particular, and led to an increased interest in developing the most effective ways of improving the ability of students in learning this language. With the introduction of new media and technology to the Arab world, today, more than ever, computer-based cognitive tools have been intentionally adapted or developed to function as intellectual partners to enable Arab students learn English as a second language and facilitate the process of communication with the outside world. As a result, most Jordanians have realized that bilingualism of this type is important in international trade and politics, and as such it is something usual nowadays to find many of the younger and middle-aged Jordanians speak more than one language. As is the case in many other countries in the region, in Jordan all students who finish the public secondary school education must have had at least eight years of instruction in English as a school subject. English has become compulsory in all elementary, preparatory, secondary Jordanian private and public schooling and university education as well. A number of public and private universities have very exacting standards where all other subjects are taught in English, though some of them are less fussy about the type of material being taught or the background of their teaching staff (see Al-Khatib 2007).

better serve the purpose of this study. The questionnaire was designed to elicit data on both language use and language attitude. The interviews were also conducted by the researchers with a narrowed down group (i.e., 46 subjects) so as to get some information on *what* language is used for *what* purposes.

Data analysis was carried out both quantitatively and qualitatively. Percentages were utilized to show how frequent English and Arabic elements are used in the text messages. A qualitative analysis was also carried out so as to highlight the communicative functions performed by using the two codes. Building on the work of earlier researchers on similar phenomena like Appel and Muysken (1987) and Bader (1995), this article will analyze the collected data according to categorization of functions. Bader (1995) employed a system of five categories for categorizing the process of switching to Arabic in the speech of French, Italian, and Russian nationals living in Jordan. This system involves: "Greetings" which refers to the Arabic words/phrases that are related to greetings and asking about health conditions; "Religious Occasions" which involves "greetings and wish exchanges during religious holidays"; "Social Occasions" which include Arabic expressions used in different social occasions; "Culture Terms" that convey connotations related to Jordanian society and culture; and "Quoting Somebody" when quoting what someone has said.

Before moving on any further, it is worth mentioning how "code-switches" were scored. That is, how we determined whether the text was primarily in Arabic as a base language or primarily in English. Only one main element was taken into consideration to determine whether switching takes place from Arabic to English or vice versa. This element is "bulkiness". By "bulkiness" we mean if the bulk of the text was written in Arabic, the switch then will be in the direction of English and if it is in English the reverse is true. "Bulkiness" is measured by counting the number of occurrences of Arabic words, phrases and/or sentences in each text against those used from English collectively and working out a percentage score for the instances of each language. The language which scores higher percentage would be treated as the base language.

In addition, to make sure that the results of this study are the by-product of differences in language choice rather than technical constraints on mobile computing system, our questionnaire included a question on the type of keypad (English or Arabic) that the subjects have on their mobile phones. All of them without exception have reported that they have both Arabic and English keypads. It is also worthwhile to mention that in order

to write a message or some words in Arabic (i.e., Arabic alphabets) the whole mobile system has to be converted to the Arabic interface, otherwise the mobile users have no choice but to use the system as is and switch between Latinized Arabic and English. This is why the great majority of switches take place between Latinized Arabic, or more precisely ASCII-ized Arabic and English.

### 3. Results and discussion

#### 3.1 Analysis of code-switching structures

Throughout our analysis of Arabic-English code-switching in the texts, the following patterns of use have been established:

1. The analysis of the data demonstrated that more than 95% of the Arabic/English texts (i.e. texts written in both languages) use Roman script for the Arabic scripts. It has also been observed that the respondents tended to use Arabic/English texts more often than totally English and totally Arabic texts, and totally English texts more than totally Arabic texts as Table (1) shows:

**Table 1.** Distribution of Arabic and English by text messages.

Type of text	$\Sigma$	%
Totally Arabic	49	27
Totally English	64	34
English/Arabic texts	68	39
Total number of messages	181	100

The results in table (1) suggest that the respondents consider using English exclusively or both languages in the written texts essential for communicating information to their recipients. In fact, they were aware of this practice. Most of them have reported that it is much easier for them to express themselves in the two languages than in either language and in English than in Arabic.

2. Upon closer examination of the distribution of written forms of Arabic in the data, we observed that Arabic with Roman scripts is utilized much more often than Arabic with Arabic scripts. More specifically, Table (2) shows that the subjects still find it easier to communicate their ideas in messages written in Arabic with Roman scripts than in Arabic scripts.

**Table 2.** Distribution of written forms of Arabic messages in the collected data.

Language	$\Sigma$	%
Arabic with Roman scripts	30	61
Arabic with Arabic scripts	19	39
Total number of messages	49	100

These figures confirm the responses given by the students to a question concerning the type of script they use when they prefer to write in Arabic. The great majority of them, particularly the female group of students, responded that it is much easier and quicker to write in either English or Roman scripts than in Arabic.

3. When we examined the distribution of the type of language used in the texts by word/phrase, as seen in (Table 3) below, we found that there is a uniform rise in the percentage scores of the three patterns of use. The highest score goes to the English lexical items (54%); the lowest pertains to the Arabic with Arabic scripts (9%); and the Arabic with Roman scripts comes second in the order of scores (37%). These findings can be seen as another evidence of the fact that English is having a far-reaching effect on the students' linguistic behavior. Putting it differently, this indicates that English has become an integral part of the professional repertoire of the students. This could be due to the fact that English is the medium of instruction at the university; all classes, exams and assignments are given in English. In addition, the students are constantly exposed to the language through the use of the Internet and other means of communication.

**Table 3.** Distribution of the type of language used in texts by word.

Language	$\Sigma$	%
Arabic with Arabic scripts	185	9
Arabic with Roman scripts	786	37
Totally English	1146	54
Total number of words/phrase	2117	100

These results could be explained on the ground that Roman letters are supported by what is known as the “ASCII” which was used in the first protocols devised to carry data on the net. Those protocols were developed for the English alphabet and users were forced to use them (Crystal 1998). It is worth mentioning that this form of Romanized Arabic did not exist before the advent of the Internet, and it can be noticed that there is a heavy use of this new form of written communication among students to such a degree that the traditional way of writing Arabic is counted out.

4. An examination of code-choice by sex, as seen in table (4) below, demonstrates that females have a stronger tendency than males to use code-switching, and males, by contrast, have a stronger tendency to use Arabic totally than English totally or mixed elements.

**Table 4.** Distribution of code-choice (i.e. alternation between Arabic and English in the text messages) by sex.

Language	Females		Males	
	$\Sigma$	%	$\Sigma$	%
Totally Arabic	22	22	27	33
Totally English	34	34	30	37
Arabic and English	44	44	24	30
Total	100	100	81	100

It is clearly evident that females tended to code-switch between the two languages more frequently (44%) than males (30%). The same pattern of differentiation can also be traced between the two sex groups in terms of

their use of Arabic scripts. Males tend to use Arabic scripts (33%) more often than females (22%). It is also noticed that messages written totally in English were favored by the two sex groups almost synonymously, (37%) and (34%) by males and females respectively.

Bearing in mind the fact that both males and females are almost equally fluent in English, the findings of the current study are consistent with those of Colley and Todd (2002), among others, who noted gender differences in which females and males were found to display different patterns of language use. They spoke of gender differences in the Japanese sample, with women using graphical accents more than three times more on average than their male counterparts. Although there is not a big difference between the two sex groups with regard to their use of either totally Arabic or totally English texts, the actual difference that is worth explaining here is their switching between Arabic and English (i.e., 14%). Smith (1979: 117), for example, argues that “the evaluative connotations of speech cannot be assessed independently of the people that use them”. He contends that men and women do not apply the same evaluative criteria in judging what is prestigious (reported in Al-Khatib 1995a: 143). Lakoff (1975), from another vantage point, assumes that women’s language represents an overall conventional politeness. Her theories on women’s language suggest that females use a language style that reflects diffidence, shyness, and lower self-confidence, indicating a lack of commitment or strong opinion (Eckert & McConnell-Ginet 2003). One device is euphemism, where a person uses words such as “fudge” or “heck” instead of profanity (reported in Huffaker & Calvert 2005: 5). Having said that, one might argue that the factors on which the meaning of these occurrences might be taken to depend are the concerns for “prestige” and “using English for euphemistic purposes”. That is, it is highly likely that female students tend to switch to English more than their male counterparts as a mark of education and prestige and at the same time for euphemistic purposes.

5. As we proceed in our analysis of the distribution of the switched elements by syntactic category, we notice the majority of the switches in our data at the level of single nouns, followed by phrases, and then clauses, as shown in Table (5).

**Table 5.** Distribution of switched elements by syntactic category.

Syntactic category	Number of switches	% of total switches
Single nouns	157	34
Phrases	99	21
clauses	57	12
Single adjectives	42	9
Conjunctions	40	8
Articles	35	7
Pronouns	22	5
Single adverbs	8	2
Single verbs	4	1
prepositions	4	1
Total	468	100

Table (5) demonstrates that 34% of the total switches are single nouns, 21% phrases, and only 12% are clauses. It is also evident that single verbs and prepositions are rarely used by the students (1% each). Similarly, pronouns and single adverbs are infrequently switched (5% and 2% respectively). These findings appear to be in agreement with those of Mustafa and Al-Khatib (1994) who observed an almost similar distribution of the mixed elements by syntactic category in the speech of a group of university professors using the two languages (i.e., Arabic and English) as a means of instruction in science lectures. It should be noted here that, as far as this study is concerned, some of the above listed expressions are written in the form of acronyms and abbreviations.

### 3.2 Factors motivating the students to use or switch to English

Data analysis has shown that there are a number of technical elements that might be responsible for the wide use of English or switching between English and Arabic (with Arabic Roman scripts) in mobile text messaging. Among these are the following:

### 3.2.1 Ease and swiftness of writing

Mobile users prefer to send mobile text messages because they are quicker, cheaper, and easier to use (Hard af Segerstad 2002). Time and the principle of least effort are important factors in the process. The subjects of this study have reported that for these same reasons they tend to employ English as a medium of communication when writing their mobile messages. One technical reason for using English is because the text is entered with the so-called “multi tap” or “multi press” technique. The interviewees indicated that English letters on the mobile keypad are fewer than Arabic letters, so it is less time-consuming for them to use English. This explanation is further supported by the fact that very few reservations were expressed by some respondents toward using English. For instance, one respondent reported “I use English because I have more experience in typing in English than in Arabic, so it would be easier for me to use English.” He also added that “some of the mobile systems have to be converted completely to Arabic in order to write a message. Therefore, the effort and time needed for writing a text message in English would be drastically reduced, and this is why I prefer to write in English.” This finding appears to be in line with the claim raised by Bautista (1999: 230) when he suggested that “within this discourse mode, a reason can sometimes be found for why a particular switch occurs, and who has called this reason “communicative efficiency” – that is, switching to the other code provides the fastest, easiest, most convenient way of saying something with the least waste of time, effort, and resources.”

### 3.2.2 Limited space in Arabic messages

Moreover, data analysis has shown that students in general find it more convenient to write in English than in Arabic. Hard af Segerstad (2002: 187) remarks that “Each Short message is up to 160 characters in length when Latin alphabets are used and 70 characters in length when non-Latin alphabets such as Arabic and Chinese are used.” For this additional reason students are quite aware that in their busy lives sending a message in English is less expensive both in terms of time and money than sending it in Arabic. More than 80% of the subjects appear to be aware of this fact and as such some of them indicated that two messages in Arabic can be written in one message in English or in Roman scripts in order to express

the same idea, and what can be expressed in two messages in English has to be expressed in four messages and so on. Therefore they are more likely to use English than Arabic in writing their messages.

Additionally, an examination of the data shows that the average message for Jordanian college students is close to 60 characters. These results appear to be in line with those of Thurlow and Brown (2003) who found that the average message for the UK college students is 65 characters. Students in a third world country like Jordan cannot afford to pay costly mobile phone bills, and instead the majority of them depend on pre-paid cards, where charges for voice calling or sending SMS messages are deducted from the debit account. SMS is generally much cheaper than voice calls. This payment method, according to Hard af Segerstad (2002), keeps the user in control of the money spent on telecommunication.

### **3.3 Analysis of code-switching functions**

As mentioned earlier, previous research indicated that code-switching is not an end in itself, rather it can serve quite a range of communicative functions in bilingual interaction. Appel and Muysken (1987: 120) contend that “it is by no means certain that code switching has the same functions within each community”. In this present study, each code was found to serve a particular type of communicative functions.

#### **3.3.1 Functions served by switching from English to Arabic**

The following discussion is based mainly on various cases of switching from English as a base language to Arabic unless otherwise noted.

##### **3.3.1.1 Socio-cultural and religious functions**

As in the case of a group of Western nationals – American, British, French and Italian – living in the northern part of Jordan (see Bader 2003; Bader & Mahadin 1996), the subjects of this study tend to code-switch to Arabic when using culturally relevant words and phrases. For instance, they are found to employ in their texts a great deal of words and phrases that reflect subtle culture nuances like *inshalla* ‘God willing’, *ya rab* ‘God willing’, *Allah yes3idek/yes3idak* ‘May God bless you’, *enshalla tkoun/tkouni b5air* ‘God willing, you are ok’, *ma bitqaser/ma bitqasri* ‘you are always there to provide help’, *5alas* ‘ok then’, *betmoon/betmooni*, ‘I am at your service’,

*salamat* ‘you are welcomed’, *bisalim 3alieki* ‘s/he sends her/his regards’, *mabrouk* ‘May you have a blessed occasion’, *7amdila 3asalaameh* ‘Thanks be to God for your safety’. It is highly likely that by using such culturally-bound expressions the message writers often express emotional attitudes that cannot be expressed in English. This type of switching, as described by Merritt et al. (1992) as well as Holmes (1992), serves “affective functions”, where the speaker attempts to use a spontaneous expression of emotion and emotional attitude to convey a particular emotional message. For illustration we give the following example which is taken from an exchange between two English graduate female students:

- (1) A: hi W [B’s first name initials] how r u? hope u done well in the comprehensive exam **ya rab** [God willing]. Listen (X) needs some information 4m u, can I give him ur mob number or nt?

B: do I know him?! F u trust him ok no problem. Thx god the exam was very good I’ll pass **enshalla** [God willing]. **shukran la3awatfik** [thanks for your kind wishing]. Wht about ur thesis?

We notice here that these two messages were written in English, where switching to Arabic occurred only when the writers used such expressions as *yarab*, *inshallah* and *shukran la3watfik*. It has been observed that the great majority of the subjects appear to be aware of the importance of using these expressions for facilitating intra-cultural communication. Commenting on the importance of using such expressions in their messages, one respondent put it this way: “(...) we inherited such expressions from our ancestors. They have become an important part of our linguistic repertoire; therefore, I cannot say anything without saying *Inshallah* ['God willing'].” Another respondent pointed out that “such expressions are an important part of our culture, so we cannot express our feelings toward each other without using them.”

Another area where the subjects were found to code-switch to Arabic is upon exchanging wishes on such religious occasions as the beginning of Ramadan (the Holy month of fasting), *Eid il-Fitr* (Moslem holiday marking the end of Ramadan), *Eid il-Adha* (Moslem holiday marking the end of the pilgrimage season to Mecca), and on other social occasions as well such as recovery from illness, returning from a long journey, engagement, wedding, graduation from school and so on.

### 3.3.1.2 Greetings

Jordanians highly value greetings and the way they are exchanged. Greetings in Jordanian society are not to be viewed as merely a usage of certain norms. Rather, they are a social norm governed by the situation in which the greeter says what is expected by the one being greeted. The patterning of the greetings, inviting or complimenting formula is found to be closely connected with the hierarchical gradation and status differences, on the one hand, and with the strategies of interaction, on the other hand (Al-Khatib 2006; Farghal & Al-Khatib 2001).

As far as this study is concerned, there was real evidence that students tend to switch from English to Arabic upon greeting each other. Moreover, it has been observed that the function of a greeting is ultimately derived from a certain communicative intent or the purpose for which the two parties are engaged in interaction. A closer examination of the text messages which are mainly written in English reveals that a huge number of Arabic expressions of greeting are exchanged by the subjects. Among the many expressions that were used are: the Islamic greeting *Asalaamu Aleikum* ‘peace be upon you’, a short version of it, which is sometimes used by some people on text messages *Salaam* meaning ‘Peace’, *ahlan* ‘hello/you are welcomed’, *keefak/keefek* ‘how are you?’, and *shou 3amel/3amleh* ‘how are you doing?’. These expressions, as Bader (2003) argues, are semantically and culturally more appropriate to be used than their English equivalents. Also, he adds that “Arabic is well-known for the abundance of words and expressions related to [this] field.” This category serves a “Directive function” as Appel and Muysken (1987) put it, or an “emblematic” or “affective” function according to Holmes (1992). The following two messages, exchanged between two students (a male and a female), are illustrative:

- (2) A: mornin H [B’s first name initial], **keefek** [how are you], sorry for sending now but am printing the section. **eash e7'tsar PTSS?** [what PTSS stands for?]

B: **Ahlan** [hello] G [B’s first name initial]...PTSS: predetermined time standard system

In asking some of the respondents about why they prefer to greet each other in Arabic, a male respondent reported “I personally do that to convert the feeling of coldness into that of warmth; maybe because they are more emotionally expressive than their English counterparts.” Another

respondent said “I think Arabic is more appropriate to be used in greetings than English.” Furthermore, the relatively high percentage of use of such Arabic expressions of greetings may be explained by the values of religion and culture (i.e., Arabic being the language of the Holy Qur'an), which are perhaps linked to the importance of Arabic and self-esteem. One respondent who was enthusiastic about the function of greetings in Arabic put it this way “(...) No, Arabic is the language of the Holy Qur'an, the language of our ancestors, and the language which shapes and is shaped by our culture, therefore, we should greet each other in this language.”

### 3.3.1.3 Quoting someone

Grosjean (1982; 2007) indicates that one of the motivations for code-switching is quoting what someone has said. Bader (2003) finds many instances of code-switching to quote someone in his data. The following are a few quotes that illustrate the types of switches to Arabic the respondents made:

- (3) A: الأخت الفاضلة...الرجاء إحضار كتاب صقر معك غدا [literally (virtuous sister), please bring Saqir's book with you tomorrow]
- B: ☺ this z the 1st time someone calls me “AL2O5T ALFADILAH”...☺ lol. Anyway, don't worry, I wont 4get 2 bring the book 2mr. Take care.

Notice that student B switched to Arabic only when she wanted to quote what student A has said to her, “AL2O5T ALFADILAH”.

In the example (3), the switch involves the words that speaker B is claiming the quoted person said. In this way, the switch, as Holmes (1992) put it, acts as a set of quotation marks. A re-analysis of data showed that this category only represented 5% of the total number of switches. Some instances of them are direct while others are indirect quotations. Our data also showed that some of such patterns of switches are used to quote a proverb or a well-known saying in Arabic. In most cases the base language was English and the quotations were in Arabic or Latinized-Arabic. This is what Appel and Muysken (1987: 119) refer to as the “directive” function of switching, whereas Holmes (1992) view it as switching for “referential” purposes.

### 3.3.2 Functions served by switching to English

English was also found to serve certain communicative functions which differ tremendously from those served by Arabic. The functions of code-switching to English will be discussed under three main headings: prestige, use of academic and technical terms, and euphemism. All of the following cases of switching, unless noted otherwise, are examples of switching from Arabic to English.

#### 3.3.2.1 Prestige

The difference between a prestigious language and a non-prestigious one heavily relies on key qualities that relate to the users of the language. University students are usually aware that in certain situations they can be more favorably valued by their interlocutors if they use more prestigious forms in their speech. English has a very special status among the educated people. It is the language that can be used only by those who are highly educated (the educated elite) and who, by virtue of their educational attainment, are ranked highly on the social strata of Jordanian society (Al-Khatib & Farghal 1999). This shows that there is unequivocal social prestige attached to English, particularly among the highly educated group of speakers. As students believe that such use may enhance their prestige, they tend to use a sizeable number of expressions from English in their text messages. Among these are the easiest and the shortest expressions related to greeting, thanking and apologizing. The following are ones of the most frequent expressions used by the text writers: *Hi, sorry, nighly ‘good night’, miss you, ok, take care (sweetie), please, thanks (a lot), thank you, bye, good luck, see you* and so on. This finding is in line with those of Hussein (1999), who anticipates similar results in his study of Jordanian university students' attitudes towards code-switching between Arabic and English. What characterizes such expressions, he argues, is “their diffusion amongst the educated in Jordanian society to the extent that they have largely substituted their Arabic equivalents.” Consider the following example which shows how students switch to English as a mark of prestige:

- (4) A: **hi**, keefik? lsn 3ndk m7adara bokra? Coz ana bokra nazleh 3aljam3a.  
 [how are you? do you have class tomorrow?] [I am going to the university tomorrow]

B: **sory** hla shft msg. Bkra dwamy 72er 3 m7drat at 10 and at 1 and at 3:45 mta jayh lazm ashfk aw ajleha lb3d bkra b519 at 2.

[I saw your message just now] [tomorrow I have classes at 10, 1, and 3:45, what time are you coming I have to see you, or you could postpone it to the day after tomorrow]

A: **hi sorry just checked my mob.** Lsn ana ma b2dar aji 3'er bokra coz 3andi ejazeh, ya seti ana b7akeki bokra lama awsal eljam3a **nightly (good night)**

[I can come only tomorrow, because the day after tomorrow I have holiday, anyway, I'll speak to you tomorrow when I reach the university]

An assessment of the subjects' attitude toward using English expressions for acquiring prestige shows that a considerable number of them (90%) appear to be quite aware of the fact that they code-switch for this purpose. The subjects' reaction to the attitude statement "whether using English expressions indicate prestige and modernization" indicate that the great majority of them (90%) agreed with the claim that English words do represent a kind of prestige in their text messages. Some of them, however, have reported that the real prestige can be acquired by using Arabic words rather than English. One subject, for example, put it this way "prestige-no, I don't think so, but it seems we use such expressions to facilitate the process of communication." Based on this result, it seems likely that the students exhibit a rather positive attitude toward code-switching, though they still view their native tongue (i.e., Arabic) as a prestigious language.

### 3.3.2.2 Academic and technical terms

Adendorff (1996: 389) sees code-switching as "a communicative resource" that enables teachers and students to accomplish a considerable number and wide range of social and educational objectives. He (1996: 400) contends that CS is "a form of sociolinguistic contextualizing behavior." Tay (1989), Myers-Scotton (1995), and Adendorff (1996) have reported that CS serves a variety of functions in diverse domains. Code-switching is used as a communicative strategy between speakers, according to the switcher's communicative intents. As far as this study is concerned, another common use of English words/phrases that emerged from our analysis is those pertaining to the field of science and technology or academic issues. The following are some of the many technical terms which were used by the students: *modem, hardware, software, report, questions, papers, makeup, exams, chapter, sheet*, and the names of courses such as *physics, pharmacy and advanced electronics, dentistry, herbal medicine*. This can be

attributed to the fact that lecturing in Jordanian universities is mostly given in English. Therefore, the English-based academic atmosphere in Jordanian universities urges students to use English terms whenever talking about university and academic issues. This category, once again, serves, as Appel and Muysken (1987) and Holmes (1992) put it, a referential function.

The following example bears witness to the wide use of academic and technical terms in the collected texts.

- (5) A: **hi** kefek ma3 lesh bedi a3'albek momken te7keeli l7ad ai **unit** el emte7an.  
 [hi, how are you? Sorry for bothering, can you tell me up to what **unit** would be covered in the exam?]
- B: they told me la7ad **sheet 15** [up to page 15]. w nas 2alole la mawdo3 (**amphetarine**) ana ra7 adros la **amphetarine**. Take care.  
 [they told me till sheet 15. some people told me till the (**amphetarine**), I will study to the **amphetarine**. Take care]

This strategy (i.e. using English academic and technical expressions) was used by subject B most probably because he did not know the corresponding terms in Arabic. This phenomenon was referred to by Grosjean (1987) as “the most available word phenomenon”. It is worthwhile to mention here that there is a vast body of literature from the debate between those who argue that most singly-occurring nouns, like the academic and technical terms the participants of this study use, are best analyzed as nonce loans (see Poplack 1988), and those who argue that code-switches and nonce loans ought to be treated in the same way (e.g., Myer-Scotton 1979). Even though there is a controversy concerning the status of these forms, we follow Myer-Scotton (1979) in categorizing such instances as CS. Thus, due to the frequent use of such terms by the students some of those students find it easier to use them than to think of their equivalents in Arabic. In this regard, Grosjean (1982) assumes that CS is triggered when a switcher cannot find a corresponding word or expression in one language or when the language being used does not have the appropriate lexical item, set phrase, or sentence.

### 3.3.2.3 Euphemism

An investigation of the collected texts shows that English words are used in certain cases for euphemistic purposes, or they are used to avoid fearful or unpleasant subjects. It is well-known that all cultures impose sanctions on

the discussion of certain issues by certain people in specific situations (see Al-Khatib 1995b). Therefore shifting from Arabic to English expressions may permit Jordanians to discuss taboo and/or offensive topics without embarrassment. English words such as *toilet*, *boyfriend*, *underwear*, *cancer*, *period* (i.e., menstrual period) are but a few examples of euphemism used by the text writers. This being the case, it can be argued that some English expressions may function as an important factor in prompting Jordanian students to use more expressions from English.

In the course of our interviews with the subjects, and due to the (unjustifiable) absence of an item related to euphemism on the questionnaire, more than thirty respondents of the students were orally asked about their opinion regarding the importance of euphemism in employing English words in the texts. The great majority of them (i.e., 78%) stressed that euphemism may play a central role in the process of making them use more words from English. As a matter of fact, a large number of the informants reported that they themselves – whether consciously or unconsciously – tend to use in their texts English words for euphemistic purposes. For instance, a female student said “I myself use English words as euphemisms. They seem to be inoffensive, especially when we talk about matters relevant to such issues as love, disease, body functions, etc.” For illustration consider the following example:

- (6) Hi 3aloush kefek? Yesterday I couldn't come to the class la2inu kan 3ind **stomachache!** Bti3rafi, it's the **period time**.  
[Hi Aloush, how are you? Yesterday I could not come to the class because I had a bad **stomachache!** You know, it's the **menstrual period time**].

#### 4. Conclusion

We set out in this study to seek answers to a number of questions concerning language choice on mobile text messages. The study indicates that code-switching between English and Arabic is used overwhelmingly in mobile text messages and that a Romanized version of Jordanian Arabic is used along with English expressions extensively. The results of this study also demonstrated that there are a number of technical elements that might be responsible for the wide use of English or switching between Arabic and English. Among these are: ease and swiftness of writing in English and limited space in Arabic messages. Since code-switching is becoming increasingly common in more parts of the world, it is of the utmost

importance to understand how CS, as a communicative strategy, functions in this particular milieu. The results of this study reveal the fact that some participants exhibit the ability to move back and forth between their two codes depending on the suitability of their communicative needs. Many instances of code-switching in the data are found to serve various sociolinguistic functions. Switching to Arabic as an embedded language, for instance, was found to serve the functions of greeting, quoting someone (i.e., to highlight contextualized situations and quotations) and a number of other socio-religious functions. However, it has been observed that students do resort to English for a number of sociolinguistic reasons. That is, they use some lexical items from English as a mark of prestige, to fill gaps in the language or to serve the function of euphemism; using certain expressions from English in place of Arabic words that may offend or suggest something unpleasant to the reader. Moreover, it has been noticed that greetings and a number of other conversational routines seem to be linguistic elements which often trigger CS in both directions (i.e., both from Arabic to English and vice versa). Although a considerable number of such lexemes and phrases as *hi*, *nigthy*, *goodby* can be seen as CS; some of them have now become an integral part of the linguistic repertoire of some of the students.

This study also demonstrated that the sex of the text writers has a role to play in the process. Females have a stronger tendency than males to use switches, and males, by contrast, have a stronger tendency to use Arabic totally than English totally or mixed elements.

Furthermore, the analysis presented in this study shows that code-switching is a structured and rule-governed process. Some syntactic categories are used much more than others; the distribution of the switches by syntactic category revealed that the majority of the switches take place at the level of single nouns, followed by phrases, and then clauses.

Finally, the emergence of new modes of communication like SMS over the past twenty years has increased practices of both code-switching and borrowing throughout the country. We argue then that when code-switching and borrowing become extensive, entirely new linguistic varieties may emerge.

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## Appendix I

A list of the numerals as used in Romanized Arabic along with their IPA equivalents.

Numeral	IPA	Example
7	ħ	<i>7ilwe</i> (beautiful)
7'	x	<i>7'ali</i> (my uncle)
3	ṣ	<i>3aali</i> (high)
3'	ǵ	<i>3'ali</i> (expensive)
9	S	<i>el9aba7</i> (morning)
9'	D	<i>9'aa3</i> (lost)
6	T	<i>6abi3</i> (stamp)
2	?	<i>bi2uul</i> (he says)

## Appendix II

The Questionnaire

Item	Strongly Agree	Agree	Uncertain	Disagree
Using English in mobile text messages enriches the Arabic language				
Using English in mobile text messages indicates prestige and civilization				
English should be used totally in mobile text messages				
Using English in mobile text messages can be seen as a good means to access Western civilization and technology				
Using English facilitates communication on this means of communication				
Using English in mobile text messages as a purposeful means of communication				
Using English indicates cultural colonization				

## The Interview Questions

### ***Personal Information***

What's your name?

In which university do you study?

Which year?

What is your major?

### ***Language background***

What languages do you know? How well?

Have you lived abroad? If yes, which country?

What is the percentage of your study material given in Arabic vs. English (or other languages)?

How about everyday life away from school, how much do you use Arabic vs. English (or other languages)?

How would you compare your speaking/listening/reading/writing abilities in Arabic and English (or other languages)?

### ***Mobile Use***

How long have you been using a mobile?

How many messages do you approximately send and receive per day?

To whom do you send usually, e.g., for friends, family, professors, or others?

### ***SMS Language Use***

What language do you use in writing messages, English, Arabic in Arabic script, Arabic in Romanized scripts? Mark.

Describe the circumstances in which you use particular languages? (formality vs. informality, with Jordanians or other Arabs, one language at a time or combined, etc.)

If you use English in SMS messages, why do you use it when you can use Arabic?

Does English vs. Arabic serve different purposes in your communications?

For what purposes do you use each language?

Does your mobile have the capacity to use Arabic script? If yes, do you think that would make a difference for you?

If all mobile keypads were multilingual, do you think that would affect your language use on mobile?

### ***Mobiles and other media***

Do you read newspapers regularly? Which ones? What language?

Do you read magazines regularly? Which ones? What language?

Do you read books regularly? What kind? What language?

What kind of things do you write regularly (besides SMS messages)? What language?

How does the use of English vs. Arabic on the mobile compare to the use of the two languages in other media (chat, e-mails, etc.)?

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