ANALISIS MORFOLOGI PENUKARAN KOD INTRA-PERKATAAN ARAB-INGGERIS DI FACEBOOK: MODEL MORFEM PERCUMA

(Morphological Analysis of Arabic-English Intra-Word Code-Switching on Facebook: Free Morpheme Model)

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ABSTRAK

Isu utama kajian semasa bertujuan untuk menganalisis morfologi percampuran morfem terikat dan leksikal daripada bahasa Arab dan Inggeris (penukaran kod intra-perkataan), dan mengetahui bagaimana penukaran kod jenis ini dilakukan. Kajian ini juga mengkaji pengekalan penutur terhadap struktur morfologi bahasa Arab dan proses pembentukan kata semasa menggunakan juzuk bahasa Inggeris. Bagi mencapai objektif kajian, kajian ini menggunakan pendekatan kualitatif. Iaitu, data kualitatif dikumpul daripada perbualan Facebook di kalangan pelajar universiti Jordan. Teknik analisis tematik digunakan untuk menyediakan analisis morfologi intra-perkataan Arab-Inggeris penukaran kod. Tambahan pula, penjelasan beberapa perbezaan morfologi antara bahasa Arab dan bahasa Inggeris disediakan bersama dengan analisis. Contoh penukaran kod dalam perkataan yang digunakan dalam sembang, ulasan dan siaran di Facebook oleh pelajar universiti Jordan disiasat. Analisis data mendedahkan bahawa terdapat tiga pola penukaran kod dalam perkataan; percampuran antara morfem infleksi Arab dan kata nama Inggeris, percampuran antara morfem infleksi Arab dan kata adjektif bahasa Inggeris, dan percampuran antara morfem infleksi Arab dan kata kerja bahasa Inggeris. Keputusan menunjukkan bahawa pelajar tidak menggunakan sebarang juzuk terikat bahasa Inggeris dengan morfem bebas bahasa Arab. Selain itu, penutur mengabaikan sebarang tuntutan tatabahasa bagi kata kerja bahasa Inggeris yang disisipkan seperti penanda kala sekarang dan masa lalu. Selain itu, data mendedahkan bahawa penutur melakukan penukaran kod intra-perkataan dalam kata nama bahasa Inggeris. Di samping itu, pelajar Jordan mengekalkan peraturan morfologi Arab tanpa sebarang pelanggaran semasa mereka menggunakan konstituen bahasa Inggeris. Kesimpulannya, percampuran kod sering dijumpai dalam perkataan dan kajian ini memperkenalkan potensi implikasi teori yang ditujukan kepada Akademi Bahasa Arab di Dunia Arab. Ahli Akademik ini bertanggungjawab untuk mencipta perkataan Arab yang sesuai yang memenuhi keperluan penggunaan bahasa Inggeris. Mencipta perkataan Arab baharu akan mengehadkan penggunaan bahasa Inggeris dalam wacana bahasa Arab, menjimatkan kemurnian bahasa Arab dan memperkaya bahasa Arab dengan istilah baharu. Itulah bahasa Arab perlu mempunyai leksikon baru untuk berkembang dan terus hidup.

Kata kunci: Hubungan bahasa; Penukaran kod; Intra-perkataan; Analisis morfologi; Model morfem bebas Poplack.

ABSTRACT

The main issue of the current study aims at analyzing the morphology of mixing bound and lexical morphemes from Arabic and English (intra-word code-switching), and finding out how this type of code-switching is performed. This study also examines the speakers' maintenance of their Arabic morphological structure and word formation process while using English constituents. In order to meet the objectives of the study, the study employs qualitative approach. That is, the qualitative data are collected from Facebook conversations among Jordanian university students. Thematic analysis technique is used to provide morphological analysis of intra-word Arabic-English code-switching. Furthermore, clarification of some morphological differences between Arabic and English is provided along with analysis. Examples of intra-word codeswitching that are used in chats, comments, and posts on Facebook by Jordanian university students are investigated. The data analysis revealed that there are three patterns of intra-word code-switching; mixing between Arabic inflectional morphemes and English nouns, mixing between Arabic inflectional morphemes and English adjectives, and mixing between Arabic inflectional morphemes and English verbs. The results indicated that students do not use any English bound constituents with Arabic free morphemes. Moreover, the speakers ignore any grammatical demands of the inserted English verbs like present and past tense markers. Plus, the data revealed that the speakers perform intra-word code-switching within English nouns the most. In addition, Jordanian students maintained Arabic morphological rules without any violations while they are using English constituents. As a conclusion, code-mixing is frequently found within words and the study introduces a potential theoretical implication which is directed to the Arabic Language Academies in the Arab World. These Academic are responsible to coin appropriate Arabic words that meet the need of using English. Coining new Arabic words will limit using English within Arabic discourse, save Arabic purity, and enrich Arabic language with new terms. That is Arabic language have to have new lexicon to develop and stay alive.

Keywords: Language contact**;** Code-switching; Intra-word; Morphological analysis; Poplack's free morpheme model.

INTRODUCTION

Code-switching is considered as one of the most unique speech styles that is applied to characterize bilingual speakers (Fromkin et al, 2014). Weinreich (1968) states that code-switching and code-mixing are essential results of language contact, and this contact is always tied with code-switching (Lafont, 1990). Sinha (2009) asserts that code-switching is a logical outcome of bilingualism. According to most scholars, code-switching is considered as one of the conversational strategies that speakers use to achieve desired goals. That means code-switching comes into view when languages are in contact. According to Grosjean (1982), code-switching is defined as a phenomenon occurs when two or more languages are used in the same conversation by the same speaker. For Thomason (2001, p. 132), code-switching is "the use of material from two (or more) languages by a single speaker in the same conversation". Brown and Attardo (2006) used the term

of style-shifting to refer to code switching. So, code-switching sometimes includes interchanging between two distinct languages, dialects, or styles within the same conversation.

The phenomenon of code-switching is noticed among Arab bilinguals who tend to use English loanwords and expressions in their speech (Alazzam, 2010). On the basis of the length of switched constituents, four types of code switching are identified (Al hazmi, 2016; Hamers and Blanc, 2000). The types are as follows: Tag insertion (where a constituent is tagged from one language to an utterance from another language), Inter-sentential or inter-clausal code-switching (where switching is performed between clauses or sentence boundaries), Intra-sentential code-switching (where switching is performed within a clause or sentence), Intra-word code-switching (where switching is performed within a word boundary). Switching within words phenomenon has become clear in our everyday life and it seems to be a normal event or a trend around us. Youth community is considered as one of the best communities that uses code-switching within their speech. The researcher agrees with Singh (1983) in that code-mixing and code-switching are closely related phenomena, and code-mixing lays under the umbrella term of code-switching. Other scholars state that there is always an overlap between the two terms and then the terms of code-mixing and code-switching are used interchangeably. The researcher of this study considers the two phenomena imply the same notion of using more than one language in the same discourse; yet each phenomenon applies the notion in a distinguished behavior that may overlap with the other.

Code-switching can occur within sentences and within words (Poplack, 2001), and this research mainly focuses on intra-word code-switching, but the intra-sentential code-switching is beyond the scope of this study and it is one of the limitations. Khalil (2010) indicates that Arabic is a derivational language and its morphological structure is rich. That means Arabic has a number of inflectional and derivational morphemes that are normally presented in the form of prefixes, infixes or suffixes. Both inflectional and derivational morphemes can entirely change the meaning of the word (Al hazmi,2016). These morphemes are attached to words to achieve certain grammatical roles such as agreement in case, number, gender, tense, and definiteness (Khalil, 1999).

Accordingly, the present study comes out to investigate the morphological patterns of Arabic-English intra-word code-switching that is performed online between Jordanian students at Yarmouk University. Additionally, the study tries to find out the extent to which Arabic-English intra-word code-switching affects Arabic words formation process. Indeed, Facebook - the largest imaginary and computer simulated community, is considered as one of the main social media that students use in universities to keep in touch with their friends and colleagues. Facebook is treated as a medium of spoken and written language in which trends of code-mixing among university students in informal social domains are identified (Bukhari et al., 2015). Bukhari et al., (2015) add that code-switching has produced an essential effect on language users of the daily face-to-face conversations as well as in online computer- mediated communications, including Facebook.

Truthfully, English is widely used in the Jordanian society and it is used in most Jordanians' daily communications. English is not only a course that Jordanians study at universities and schools, but also it is a language that Jordanians use on the social media and in streets. To explain, in the Jordanian society, streets' names are written in Arabic and English, signs

as well as advertisements are written in Arabic and English. A great number of youths in Jordan listen to English songs and they watch English series and movies. They also play electronic games which are designed in English. Jordanians tend to use English in interacting through social media and when surfing the internet. Additionally, many electronic newspapers are published in English such as Ammon and Jordan Times. Worth noting is that getting a good job in Jordan requires having a good command of English (Al Musa, 2016). Thus, code-switching is a widespread phenomenon in university setting, especially, in Yarmouk university (Hussein, 1999; Alazzam, 2010; Al Hayek, 2016).

According to Al-Hayek (2016), there are many strong reasons to learn and use English in the Jordanian society. The first reason is that Jordan was a British colony. Moreover, Jordan is a member of many international organizations such as the United National Human Rights Council and the United Nations. Furthermore, there are also many social motivations for using English among Jordanians especially university students; one of the motivations is that speaking English is a sign of prestige and showing off. Additionally, English is required for employment in good positions. The present research mainly intends to analyze the morphology of Arabic-English intra-word code-switching that is used on Facebook, and to find out the extent to which Arabic-English intra-word code-switching affects Arabic word formation process. Accordingly, this study attempts to answer the following questions:

    i.   What are the patterns of Arabic-English intra-word code-switching used on Facebook?
    ii. To what extent does Arabic-English intra-word code-switching affect Arabic word formation process?

LITERARURE REVIEW

In fact**,** code-switching has usually been considered as an accidental manner standing out from incomplete language acquisition or semi-legalism (Grosjean, 1982). Code-switching uses items from two languages that sometimes have different linguistic systems in the same utterance. Therefore, a number of studies affirm that code-mixing is subject to grammatical constraints and "it has the potential to produce utterances that violate the structural properties and rules of one or both languages" (Sauvé, 2000, p.8). Poplack and Sankoff (1988, p. 1175 cited in Sauvé, 2000, p.8) state that "bilinguals are capable of incorporating their two languages into a single utterance without violating the grammatical rules of either language". That is, code-switching can be applied when the two languages are incompatible with respect to their inflectional morphology, word order, semantic differences, sub-categorization patterns, and idiomatic constructions (Wheeler & Westwood, 1987 cited in Sauvé, 2000). Sauvé (2000) points out that there are two essential theories that have been proposed to describe linguistic constraints on code-switching; Poplack's structural constraints (1980) and Myers-Scotton's Matrix Language Frame Model (1993).

Poplack (1980) and Myers-Scotton (1993) assert that code-switching is not an incidental phenomenon; rather it is subject to grammatical and syntactic constraints. Auer (1984) confirms that code-switching and code-mixing have to be analyzed from different perspectives; grammatical, sociolinguistic, and interactional sociolinguistic perspectives. Grammatical

perspectives are one of the most important perspectives since they are fundamentally interested in the syntactic constraints and rules that govern alternation.

Btoosh and Taweel (2012, p.1) state that code-switching is not performed randomly. They suggest that "There are no limits to what language may alternate roles, but there are constraints on how this may occur. Code-switching may be motivated by social, pure linguistic or syntactic reasons." Nafa (2013) investigate code-switching among Arabic-English adult bilinguals in the UK. They mainly focused on the grammatical structure and the pragmatic role in this switching. The research data were obtained from tape-recorded informal conversations lasting approximately five to six hours. Six female informants participated in this research in addition to the researcher herself. Data analysis revealed that there are two grammatical structures of Arabic-English code switching, and they are insertion and alternation, the former is more common in the switching. In most conversations, the Arabic language is implied to be the base language in most conversations.

Aldaw (2019) studied the constraints on code mixing and code switching in Arabic and English in Arabic speaking societies. The author investigates the utterances of switching with regard to the morphological and structural typological constraints. The research data were collected randomly from spontaneous oral interaction of the Arabic/ English users through observation, conversation, in addition to T.V dialogues and mass media. The data were analyzed in terms of content and revealed that there are constraints govern Arabic-English code switching to a communicative purpose, and then it is not happening randomly. The findings include the structure, frequency and constraints of code-mixing. Some of the findings are as follows: speakers tend to mix full words more than empty words. The size of the constituent of the matrix language is not always equal to size of the constituent of the embedded language. The grammatical structure is sometimes violated because of the typological differences between Arabic and English. In addition, the findings confirmed that Arabic and English code switching is possible across the typological boundaries although the two languages are not the same family. Kniaź and Zawrotna (2021) examined Arabic-English code switching. They mainly investigated the inserted English verbs in Egyptian Arabic-English code-switching. They discovered four patterns of verb insertion. First, non-past tense inserted verbs which are morphologically integrated with Arabic. Second, third-person plural verbs in non-past forms which show incomplete assimilation and lack the plural suffix *-u*. Third, past forms inserted verbs which are either past forms or bare forms attached to Arabic auxiliaries in order to indicate the tense. Fourth, English inserted verbs cannot be attached to Arabic pronouns complements; instead, English pronouns are used.

Free Morpheme Constraint

Poplack's study in (1980) is one of the most influential studies on code-switching. Truthfully, her study proposed general constraints that attract scholars' attention to test their universality in code-switching behaviors that happen in all language pairs. That is, a number of studies on code-switching in different language pairs have focused on checking the universality of Poplack's proclaimed general constraints (Park, 1990; Al hazmi, 2016). In her study, Poplack asserts that code-switching is subject to three universal constraints: free morpheme, equivalence, and size of constituent constraints. The current study mainly examines free morpheme constraint by analyzing

the morphology of Arabic-English intra-word code-switching. Poplack (1980, p.586) indicates that "Codes may be switched after any constituent in discourse provided that the constituent is not a bound morpheme". In other words, Poplack claims that mixing between bound morpheme and a lexical morpheme is not accepted unless the lexical morpheme is phonologically adopted and borrowed by the language of the bound one.

As a sum, free morpheme constraint went that switching can be after any item, but if the item is a bound morpheme, mixing is not possible. Free morpheme constraint prohibits mixing between a bound morpheme from one language and lexical morpheme from another one. For example, the utterance 'Je fait-ing' which means 'I am doing' that mixes the French verb 'fait' with the English bound morpheme 'ing' violates the free morpheme constraint. According to Poplack (1980) the previous example is impossible because the English bound morpheme 'ing' cannot be used to inflect the French lexical verb. Another impossible example given by Poplack (1980) is the following Spanish-English code-mixing:

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* eat-iendo   (Spanish)
'eating'   (English)

</div>

This example attached the Spanish continuous aspect bound morpheme "iendo" which is equivalent to 'ing' to the English free morpheme "eat". As a result, it is clear that Arabic-English intra-word code-switching needs to be examined and explained in the Jordanian society in order to find out the extent to which free morpheme constraint is applied and whether it is universal.

METHODOLOGY

Sample of The Study

The current study is directed to investigate Arabic-English intra-word code-switching among Jordanian undergraduate students in their Facebook comments and posts. The students are studying in Yarmouk university, which is one of the biggest universities in the Middle East. 50 students are asked to contact each other on Facebook during the pandemic of Corona Virous. Then, the sample of the current study is purposive sampling. For Patton (2002, p.230), purposive sampling aims to come up with "insight and in-depth understanding" of the research topic. Thus, the sample size has no effect on the quality of the results and the research design (Holloway & Wheeler, 2010).

Data Collection

The data were collected from Facebook posts and comments. In this study, the nature of data is appropriate to achieve the principle of qualitative analysis. That is, Facebook comments and posts are used collect qualitative information regarding code-mixing. The thematic analysis is generally used to analyze texts, so this point matches the nature of the research data, Facebook messages. Braun and Clarke (2006, p. 78) report that "thematic analysis should be seen as a foundational method for qualitative analysis". Thematic analysis is defined as "a method of identifying,

analyzing and reporting patterns (themes) within data. It minimally organizes and describes your data set in (rich) detail" *(ibid*., p. 79). Thus, the first question concerning the types of patterns of code-mixing within words, the second question concerning the effect of the grammatical differences between Arabic and English on Arabic structure.

Data Analysis

To achieve the research objectives, the current study employs qualitative approach. This approach is the suitable method as it provides more illustration about the phenomenon, and it gives a detailed description and analysis (Mason, 2002). Braun and Clarke (2006, p. 78) point out that "thematic analysis should be seen as a foundational method for qualitative analysis". Thematic analysis is defined as "a method of identifying, analyzing and reporting patterns (themes) within data. It minimally organizes and describes your data set in (rich) detail" (Braun & Clarke, 2006, p. 79).
          The qualitative method relies on both inductive and deductive forms of analysis. The inductive form of analysis is applied in order to analyze the originated patterns of switching within words on Facebook in detail, and to express the effect of such originated patterns of switching on Arabic word formation process. On the other hand, the deductive form of analysis is applied to check the validity of the former theories.

RESULTS AND DISCUSSION

Morphological Analysis of Code-Switching

The data analysis revealed that Arabic-English intra-word code-switching is frequent among students' conversations. In the current study, 102 examples on intra-word codeswitching are found through the communication between the 50 students. The originated patterns of intra-word switching are found within 18 posts and 48 comments. Although of the morphological differences between Arabic and English, students mix Arabic inflectional morphemes with English items such as nouns, verbs, and adjectives. Moreover, in the current study, no English morphemes are mixed with Arabic items. The following is a detailed analysis of some intra-word code-switching instances found in the corpus.

Mixing arabic morphemes with english nouns

There are several examples illustrating switching within word boundaries. Typical examples for such pattern of intra-word-switching are:

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1. '**account**-ik'   (Arabic)
'account-your'   (English)

</div>

Example 1 shows that the English word 'account' is mixed with the Arabic feminine possessive addressee marker 'ik' which means 'your'. Note that, in Arabic, possessive pronouns are

considered as bound inflectional morphemes that cannot stand alone. The possessive pronoun 'ik' inflects number and gender, The followings are similar examples that share the same concept of mixing, English noun with different Arabic possessive markers.

2.'**profile**-at-hum'	(Arabic)	3.'**profile**-ha'	(Arabic)
'profile-s-them'	(English)	'profile-her'	(English)
4.'**profile**-oh'	(Arabic)	5. '**profile**-ak'	(Arabic)
'profile-his'	(English)	'profile-your'	(English)

As the examples 2,3,4, and 5 show, the Arabic markers 'at', 'hum', 'ha', 'oh', and 'ak' are suffixed to the English noun 'profile' in order to make agreement with the possessor in number and gender. The last example 'profile-ak' mixes the Arabic masculine possessive addressee marker 'ak' with English noun, while example 1 mixes the feminine possessive addressee marker 'ik' with English noun. This type of agreement is not found in English. 22 examples, in the current study, supported this pattern.

6.'el-**description**'	(Arabic)
'The-description'	(English)
7.'el-mall'	(Arabic)
'the-mall'	(English)

In examples 6 and 7 the Arabic determiner 'el' which means 'the' is mixed with the English nouns 'description' and 'mall'. Contrary to English, Arabic determiners are considered as inflectional bound morphemes that cannot stand alone and they are used to inflect definiteness (Khalil, 1999). This patten ranked in the first position and happened 33 times in the current study.

8. '**goal**-een'	(Arabic)
'goal-two'	(English)
9.'finger-een'	(Arabic)
'finger-two'	(English)

Examples 8 and 9 show the way of referring to two entities in Arabic, which is called 'dual' in Arabic grammar. In example 8 and 9, the English nouns 'goal' and 'finger' are attached to the dual marker 'een' which indicates dual number. This pattern was repeated 4 times in the current study.

10.**course**-at	(Arabic)
'course-s'	(English)
11.'hint-at'	(Arabic)
'hint-s'	(English)

Examples 10 and 11 indicate that the Arabic feminine plural marker 'at', which is equivalent to the English plural marker 's', is attached to the English nouns 'course' and 'hint' to indicate pluralization. Note that Arabic has feminine plural marker and masculine plural marker (Khalil, 1999), and 'at' is an inflectional bound morpheme that is used to inflect the feminine plural form of the noun. This pattern recurred 12 times in the current study.

As a conclusion, the previous examples prove that Jordanian speakers attach Arabic morphemes to English nouns with no consideration for the fact that such markers have no existence in the embedded language's (English) morphological system. In fact, the students use the inserted English constituents according to their mother tongue and they apply Arabic morphological rules to make agreement in number, gender, and definiteness. That means English nouns are formed and built according to Arabic word formation process. Worth noting is that mixing within English nouns is performed 71 times in this study.

Mixing arabic inflectional morphemes with english adjectives

Data analysis revealed that the Arabic definite article 'el', which cannot stand alone and should be attached to a lexical morpheme, is attached to English adjectives. Typical examples for such cases are**:**

12. 'el-wajbat el-**favorite**'   (Arabic)
    'the-meals the-favorite'   (English)

13. el-youm el-**free**   (Arabic)
    'The-day the-free'   (English)

Example 12 shows how the student used the Arabic definite article 'el' which means 'the' as a prefix and he attached it to the English Adjective 'favorite', in order to make agreement in definiteness between the Arabic definite noun 'el-wajbat' and the English adjective 'el-favorite'. Such morphological rule does not exist in English Khalil (2010). Similarly, example 13 also shows that the speaker followed Arabic morphological rules and achieved agreement in definiteness between the Arabic definite noun 'el-youm' and the English adjective by attaching the inflectional morpheme 'el' to the English adjective 'free' in order to inflect definiteness. Such pattern of mixing recurred 11 times in this study. The following examples 14 and 15 express the same pattern of mixing within word.

14. 'men el-ashyaa el-**appriciated**'   (Arabic)
    'from the appreciated things'   (English)

15. 'el-**holy** Quraan'   (Arabic)
    'The holly Quraan'   (English)

Another pattern of mixing within word is the Arabic plural feminine marker 'at' with the English adjective 'nice' as in the following example:

16. '**nice**-at'   (Arabic)
  'nice-they'   (Literal translation English)
  'They are nice'   (English)

Unlike English, Arabic adjective can carry gender and number markers as well as definiteness marker to achieve agreement with the English noun it modifies in terms of number, gender, and definiteness (Khalil, 1999). In example 16, agreement is achieved by attaching 'at' to the English adjective 'nice' in order to indicate that the noun, which the adjective describes, is plural and feminine. This pattern occurred just once in the current study.

Mixing between arabic inflectional morphemes and english verbs

The following examples indicate that intra-word code-switching also occurs between Arabic inflectional morphemes and English verbs:

17.'like-hum'   (Arabic)
  'like-them'   (English)

Example 17 mixes the English verb and the Arabic morpheme 'hum' which means 'them' and functions as the object of the verb. Such grammar can occur in Arabic, but it cannot be found in English, that is, verbs and objects cannot be attached to each other in the same word in English.

18.'t-share-ha'   (Transliteration)
  'she-share-it'   (Literal Translation)
  'She shares it'   (Translation)

Example 18 mixes the English verb and the Arabic morphemes 't' which is equivalent to 'she' and functions as the subject of the verb. Furthermore, the verb is also attached to another morpheme 'ha' which is equivalent to 'it' and functions as the object of the verb. Contrary to Arabic, such grammar cannot be found in English, that is, subject, verbs, and object cannot be formed within the same word. Additionally, example 18 shows that the speaker did not add the third person present tense 's' to make subject verb agreement.

19.'mention-ha'   (Transliteration)
  'mention-it'   (Literal Translation)
  'Mentioned it'   (Translation)

In example 19, the verb 'mention' is attached to the Arabic morpheme 'ha' which is equivalent to 'it' and functions as the object of the verb. The speaker here ignored the past tense marker 'ed' and he used the English verb without any inflectional morphemes that indicate past tense. This pattern of mixing occurs 19 times in the current study. The followings are additional examples that present how speakers mix Arabic morphemes with English verbs:

20.'a-text'	(Arabic)	21.'a-message'	(Arabic)
'I text'	(English)	'I-message'	(English)
22.'a-cancel'	(Arabic)	23. 'cancel-iha'	(Arabic)
'I-cancel'	(English)	'cancel-it'	(English)
24.'n-skip'	(Arabic)	25. 'n-share'	(Arabic)
'we-skip	(English)	'we-share'	(English)

In fact, the findings of the current study indicate that mixing within word is common and familiar despite the morphological differences between Arabic and English. In this study, students attach bound morphemes of Arabic language to English free morphemes, and they follow their mother tongue and form the inserted English words according to it. Three patterns of intra-word code-switching are found in the current study. At the first position and with a high percentage of frequency (69%) is that students mix Arabic inflectional morphemes like 'at','el', 'hum', and 'oh' with English nouns in order to make agreement in number, gender, and definiteness. Secondly, students mix Arabic inflectional morphemes like 't', 'n', and 'hum' with English verbs in order to indicate the subject and the object. Finally, students mix the Arabic inflectional morphemes to English adjective to make agreement between noun and the adjective in gender, number, and definiteness.

As a matter of fact, the current study findings strongly contradict Poplack's constraint of 'free morpheme' that states "Codes may be switched after any constituent in discourse provided that the constituent is not a bound morpheme" (Poplack,1980, p.586). Truthfully, a number of studies support the present study findings and show examples that violate the free morpheme constraint. Redouane (2005) points out that Arabic-French code-switching occurs across word internal morpheme boundaries, and Arabic inflectional morphemes attached to French stem morphemes. Bowers (2006) points out that Africa-English code-mixing involves some counter-examples of free morpheme constraint in which African inflectional morphemes are attached to English verbs. Additionally, Rezaeian (2009) indicates that the data on Persian-English code-switching provide several compatible examples wherein English nouns and adjectives are attached to Persian bound morphemes. In their study on Romanian-Arabic code-switching, Kanakri and Ionescu (2010) also contradict 'free morpheme' constraint and show that Romanian plural markers are attached to Arabic nouns. The findings of the current study are supported by various studies concerned with congruence theory. According to Sebba (1998), congruence takes into account the pragmatic and social aspects of code-switching as well as the syntactic ones. In fact, Congruence is treated as one of the important characteristics of code-switching (Al-hazmi, 2016). According to Al-hazmi (2016, p.195) "The locus of congruence is the mind of the speaker, but community norms determine, by and large, the behavior of individual speakers. Bilinguals create congruent categories by finding common ground between the languages concerned". On the other hand, the current study contradicts the findings of Bentahila and Davies (1983). Bentahila and Davies (1983) revealed that Arabic-French code-switching prevents intra-word switching. They consider such type of mixing is felt to be strange and sometimes incomprehensible. Furthermore, the current

study findings contradict Berk-Seligson findings in (1986). Berk-Seligson (1986) supports free morpheme constraint and he found frequent occurrences of large intra-sentential constituents.

Regarding the effect of the originated patterns of mixing within words on Arabic word formation process, the data reveled that such type of switching follows the Arabic rules without any violation of its grammar. That is, students dealt with the inserted English words as they are part of their first language and apply all the required morphological inflections to achieve agreement. Yet, speakers perform code-switching without consideration of the embedded language morphemes that should be added, like third person present tense 's' and past tense marker 'ed'. As a matter of fact, the performance of intra-word switching does not damage or break Arabic word formation process, but it violates English language rules.

CONCLUSION

The purpose of this study is to investigate the morphological patterns of intra-word code-switching among Arabic-English speakers on Facebook. In the current study, three morphological patterns of mixing are found; mixing Arabic inflectional morphemes with English nouns, mixing Arabic inflectional morphemes with English verbs, and mixing Arabic inflectional morphemes with English adjectives. Overall, Arabic-English intra-word code-switching does not affect Arabic word formation process, but it affects the English one. Actually, the data of the present study affirm the congruence model. So, speakers perform several strategies to achieve congruency in intra-word code-switching. On the other hand, Arabic-English intra-word code-switching violates the validity of free morpheme model proposed by Poplack (1980). As a sum, the present study asserts that intra-word Arabic English code-switching is acceptable and often seems to be possible despite the morphological differences between Arabic and English.

REFERENCES

Aldaw, Hassan. (2019). Constraints on code-mixing and code- switching in Arabic and English in Arabic speaking community. *International Journal of Development Research, 9* (1), 25496-25500.

Al Hayek, R. (2016). *Arabic–English code-mixing by Jordanian university students*. PhD Thesis, Western Sydney University.

Alazzam, S. (2010). *Functions of code-mixing in Yarmouk University students' speech* (Unpublished master's thesis). Yarmouk University, Irbid, Jordan.

Alazzam, S., Sepora, T., & Tan, D. 2021. Analysis of Jordanian EFL students' expression of disagreement via speech acts**.** *The Asian ESP Journal, 17*(2), 210-230.

Alhazmi, A. (2016). Linguistic aspect of Arabic-English code switching on Facebook and radio in Australia. *International Journal of Applied Linguistics & English Literature, 5*(3), 184.

Al Musa, J. (2016). *Jordanian EFL university instructors' and students' attitudes towards code mixing and their self – reported use of it: a case study of the University of Petra* (Unpublished PhD. Dissertation), University of Perta, Jordan.

Auer, J.C.P. (1984). *Bilingual conversation*. Amsterdam: John Benjamins Publishing Company.

Bentahila, A., & Davies, E. E. (1983). The syntax of Arabic-French code-switching. *Lingua, 59*(4), 301-330.

Berk-Seligson, S. (1986). Linguistic constraints on intrasentential code-switching: A study of Spanish/Hebrew bilingualism. *Language in Society, 15*(03), 313-348.

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77-101.

Brown, S., & Attardo, S. (2006). *Understanding language structure, interaction, and variation: An introduction to applied linguistics and sociolinguistics for nonspecialists.* (2nd ed.). Michigan: The University of Michigan Press.

Bowers, D. L. (2006). *Grammatical constraints and Motivations for English/Afrikáans Code switching: Evidence from a local radio talk show* (Doctoral dissertation, Department of Linguistics, University of the Western Cape).

Bukhari, N., Anuar, A., Khazin, K., & Abdul Aziz, M. (2015). English-Malay code-mixing innovation in Facebook among Malaysian university students. *Researchers World, 16*, 01-10.

Fromkin, V., Rodman, R., & Hyams, N. (2014). *An introduction to language (10th ed.)*. Boston, MA: Wadsworth Cengage Learning.

Grosjean, F. (1982). *Life with two languages*. London: Harvard University Press.

Gurmit, S.P.S. & M.K.S. Singh. 2019. Crossing the Interdisciplinary Border: A Structural Linguistics Genre Analysis. *Opcion. 35*(21). 568-588.

Hamers, J. F., & Blanc, M. H. (2000). *Bilinguality and bilingualism*. Cambridge University Press.

Holloway, I. and Wheeler, S. (2010). *Qualitative research in nursing and healthcare*. Oxford: Wiley Blackwell.

Hussein, R. 1999. Code–alternation among Arab college students. *World Englishes, 18*(2), 281–289.

Kanakri, M., & Ionescu, V. (2010). *Prototypes of Code-switching in the Speech of Romanian/Arabic Bilinguals in Jordan. Jordanian Journal for Language studies and literary works*. Yarmouk University.

Khalil, A. (2010). *A contrastive grammar of English and Arabic*. Jordan: Jordan Book Centre.

Kniaź, M. & Zawrotna, M. (2021). Embedded English verbs in Arabic-English code-switching in Egypt. *International Journal of Bilingualism, 25*(3), 622–639.

Lafont, R. (1990). Codeswitching et production du sens. In Rodolfo Jacobson (Ed.), *Codeswitching as a Worldwide Phenomenon* (pp.71–83). New York: Peter Lang Publishing.

Mason, J. (2002). *Qualitative Researching*. London: Sage.

Mayers-Scotton, C. (1993). *Social Motivation for Codeswitching. Oxford Studies in Language Contact.* New York, Oxford: University of Oxford Press.

Myers-Scotton, C. (1993). *Duelling Languages: Grammatical Structure in Codeswitching*. Oxford, England: Oxford U Press.

Nafa, H. (2013). *Code-switching among Arabic-English adult bilinguals in the UK: syntactic structures, and pragmatic functions* (Unpublished Master's thesis). University of Manchester, Manchester, England.

Pfaff, C. (1979). Constraints on language mixing. *Language 55*, 291-318.

Park, J. (1990). *Korean/English intrasentential code-switching: matrix language assignment and linguistic constraints* (Published PhD. Dissertation), University of Illinois, Urbana, Illinois.

Patton, M. (2002). *Qualitative research and evaluation methods.* Thousand Oaks, CA: Sage.

Poplack, S. 1980. Sometimes I'll start a sentence in Spanish termino en espanol. *Linguistics 18*, 581-618.

Poplack, S. (1981). Syntactic structure and social function. *In R. P. Duran (Ed.), Latino Language and Communicative Behavior* (pp. 169-184*)*. New Jersey: ABLEX.

Poplack, S. (1980). Sometimes I'll start a sentence in Spanish Y TERMINO EN ESPAÑOL: toward a typology of code-switching1. *Linguistics, 18*(7-8), 581-618.

Poplack, S. 1983. Intergenerational variation in language use and structure in a bilingual context. *Multilingual Matters, 8*, 42-70.

Poplack, S. 2001. Code-switching (linguistic). *International encyclopedia of the social and behavioral sciences*, 2062-2065.

Redouane, R. (2005). *Linguistic constraints on codeswitching and codemixing of bilingual Moroccan Arabic-French speakers in Canada*. In ISB4: Proceedings of the 4th International Symposium on Bilingualism (pp. 1921-1933).

Rezaeian, F. (2009). *Structural and social aspects of codeswitching among Iranian/Canadian bilinguals* (Doctoral dissertation, Dept. of Linguistics-Simon Fraser University).

Sebba, M. 1998. A congruence approach to the syntax of codeswitching. *International Journal of Bilingualism, 2*(1), 1-19.

Sauve, V. (2000). *Grammatical constraints on child bilingual Code-mixing* (Published PhD. Dissertation), McGill University, Montreal, Canada.

Sebba, M. (1997). *Contact languages: Pidgins and creoles*. New York: ST. Martin's Press, Inc.

Singh, R. (1983). We, they, and us: A note on code-switching and stratification in Nurlh, India. *Language in Society, 12*:71-73.

Sinha, S. (2009). Code switching and Code-mixing among Oriya trilingual children– a study. *Language in India, 9*, 274–283.

Taweel, M. & Btoosh, A. (2012). *Syntactic Aspects of Jordanian Arabic-English Inter-sentential Code-switching*. Academic writing. Asian EFL Journal 1, 257-270.

Thomason, S. (2001). *Language contact*. Edinburgh: Edinburgh University Press.

Weinreich, Uriel. (1968). *Languages in contact*. The Hague: Mouton. Teaching Research press.

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