First Language Role in Loanwords Adaptation: A Study of English Loanwords Into Taif Arabic

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Language is the best means of communication with the people in your surroundings. People create or find word to name and describe new things which they never saw, examining the role of the speaker’s native language in loanword adaptation. This study aimed to investigate how the English loanwords into Taif Arabic (TA) are phonologically adapted. The study adopted a qualitative and descriptive approach. The study collected 190 English loanwords from national TA speakers of various ages, genders, and educational levels. These loanwords were transcribed using IPA symbols. Online Cambridge Dictionary is used to compare the pronunciation of the loanwords in DL and RL. The outcomes of this paper discovered that substitution was the most common adaptive process and deletion was the rarest. It can be concluded that the determinant of the adaptation process is the phonological rules of the speaker’s native language. The results of this study are of great benefit to learners of Arabic English.

*Keywords*: loanwords, Taif Arabic, phonological adaptation, substitution, declusterisation

**Introduction**

Language is the best means of communication. Wherever humans live, they find words and expressions in their language that enable them to communicate with each other about the surroundings, so their language will never fail them; even if they encounter a new situation or see a creature that they have never seen, they will be able to communicate about it. When new surroundings are found, people will find or create words to name and describe them. In the case that these new things have names in other languages such as the new technological devices, either new names will be created or the original name will be retained with or without certain modifications. One of the most important outcomes of a linguistic interaction situation is language borrowing. Borrowing, according to Poplack, Sankoff, and Christopher (1988), is the process of incorporating a term from a second language (L2) (educational or source language) into a first language (L1) (loan or recipient language) vocabulary. In any corpus of loanwords, nouns are invariably the most common group (Cannon, 1998; Matras, 2009).

The phenomenon of using words from other languages is frequently confused in terminology, for example, the difference between borrowing, loanwords, and code switching. Loanwords and code-switching are seen by many linguists as a continuum in which code-switching acts as the first means of presenting new words in the

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A STUDY OF ENGLISH LOANWORDS INTO TAIF ARABIC

recipient’s language (e.g., Heath, 1989; Romaine, 1989; Myere-Scotton, 1992). In this study, the terms “borrowing” and “loanword” will be considered as synonyms (cf. Tadmor, 2009). Gradually and slowly, loanwords go through an “adaptation process” (Kang, 2011) to compare the model of their national language. The language in which loanwords are used is called the donor language (DL), and the language in which loanwords are used is called the receiver language (RL, henceforth). Loanwords are recurrent, widespread, and collective. They are used regularly and appear to be permanently present in RL. Therefore, the adaptation process of loanwords seems to be a diachronic one (Thomason & Kaufman, 1988) which results in that loanwords may become established in RL as part of its lexicon. This, in turn, provides a reason for the fact that many of the monolingual speakers of RL use loanwords in their interactions unaware of their origin or even that they are foreign words (Al-Saidat, 2011). The integration process of loanwords involves some adaptation processes to match the linguistic constraints of RL such as their assimilation to the phonological and morphological systems of RL (Al-Saidat, 2011).

The ways in which loanwords are adapted in RL enable linguists to uncover the phonological system of RL (Kawahara, 2008). For example, the declusterisation process involved in the adaptation of some foreign words including loanwords reveals that RL does not allow such clusters. When languages collide in a multilingual context, words from one language become interchangeable. As stated by Haspelmath and Tadmor (2009), no language in the world is completely free of loanwords.

According to Haspelmath and Tadmor (2009), no language around the globe is completely devoid of loanwords. Till then, loanwords have overcome all phonotactics hurdles in terms of grammar, phonology, and morphology in order to indigenize. Words taken from another language are typically adapted to fit the recipient language’s phonetic pattern (RL). Some loanword patterns, on the other hand, are difficult to account for using the RL phonological grammar. Peperkamp (2005) describes one of these patterns as “unnecessary repair” to which unfamiliar sound structures are applied, even if the original format is allowed in RL (Golston & Yang, 2001; Kang, 2003; Peperkamp, 2005).

Linguistic Contact Between Languages Results in Lexical Borrowing

Loanwords (or borrowed vocabulary) are “words acquired into the lexicon of a language through borrowed words (or sent or copied) at some point in their history”, according to Haspelmath & Tadmor (2009, p. 36). “Vocabulary borrowing is an important aspect of language interaction, and it is recognised for its significance in language history and change” (Tranter, 2000, p. 377). Arabic has hundreds of foreign languages, not just from European languages like Italian, French, and English, but also from other languages like Turkish, Hindi, and Persian, thanks to linguistic contact with other languages in recent times. Arabic is a hundreds of foreign languages not only from European languages such as Italian, French, and English, but also from other languages such as Turkish, Hindi, and Persian. In Arabic, the subject of loanword adaptation has been studied in a variety of methods. Loanwords from these languages have been studied in Standard Arabic and its other spoken variations from phonological, semantic, and morphological perspectives. However, no studies have investigated the phonological perspective of Taif Arabic (TA), a variant of Arabic spoken in Saudi Arabia.

But no study has explored the phonological perspectives of Taif Arabic (TA), a variety of Arabic spoken in Saudi. In this regard study aims to explore the phonological adaptation of English loanwords into Taif Arabic (TA), a variety of Hijazi Arabic spoken in Taif city, Kingdom of Saudi Arabia in order to understand the role of the speaker’s first language in the adaptation of loanwords.
A STUDY OF ENGLISH LOANWORDS INTO TAIF ARABIC

Literature Review

Foreign language research is a relatively new field of study. It’s an interesting area because it highlights potential conflicts that can occur between systems in the two languages involved. Loanword adaptation, in general, indicates how non-native sounds are perceived by borrowers by changing them to satisfy native phonotactic or segmental limitations (Silverman, 1992; Yip, 1993; Paradis & La Charité, 2002; Peperkamp, Vendelin, & Nakamura, 2008). Loanword adaptation often provides new information about the relationship between language perception and phonological grammar. Loanword adaptation, in particular, gives a unique view into the interaction between the source and borrowing languages’ relational aspects of phonetics and phonology (Daland, Oh, & Davidson, 2019). On the extent to which phonetic and phonological information affects loanword adaptation, there are two primary points of view. The phonological approach asserts that a source language’s phonological representation is crucial to adaptation, but phonetic approximation has little impact on loanword adaptation (Lacharité & Paradis, 2005).

Loanwords are integrated into RL through several adaptation processes. These processes, according to Haugen (1969), include that a foreign word is introduced by a bilingual as a code-switch then the native speakers of RL including the monolinguals one start to use it relying on the use and pronunciation of the bilingual who first introduced it, and such word becomes part of RL lexicon when it is spread throughout the speech community of RL. The pronunciation and form of these words can be modified to conform to the RL phonology and morphology. RLs employ different techniques to integrate these items into their systems. The present study will attempt to uncover the techniques and methods involved in the phonological integration of English loanwords into Taif Arabic (TA, henceforth).

The presence, the use and the adaptation of loanwords in RL have attracted the attention of the researchers; it has been investigated in different languages from different perspectives. For instance, Kim (2020) analyzed unnecessary adaptations in which the structure of the source language is repaired, even if the form of the foreign language is faithful to the structure of the borrowed language. He analyzed Korean as RL. His findings are consistent with the perceptual adaptation approach, where the seemingly unmotivated insertion of vowels by Korean listeners is not a production grammar that maintains perceptual similarity between English and Korean forms, but English. It suggests that it is due to a misunderstanding of the word. The perception of fictitious vowels correlates with the audible release burst of the English end register. Similarly, Puspitasari and Subiyanto (2020) analyzed the phonological adaptations of English loanwords to Spanish, Sa’adia (2015) and Al-Saidat (2011) studied the adaptation of English loanwords in Jordanian Arabic in terms of phonology and morphology respectively, Barka and Hassan (2020) studied the phonological adaptation of Hausa loanwords into Pabur-Bura, Ryu, Kang, and Han (2020) studied the effects of phonetic duration on loanword adaptation, Dubeda (2020) conducted a contrastive study of the phonological adaptation of loanwords in French, German, and Czech, Abdurrahim and Jalil (2020) studied the phonological replacement of loanwords used in Indonesian, Alshammar and Alshammar (2020) studied the phonological and morphological adaptation of Arabic loanwords into Turkish, Hashimoto (2019) investigated the sociolinguistic effects on loanword phonology, and Both (2016) investigated the phonological phenomena of Hungarian loanwords in the Romanian Language.

The classical work of Butros (1963) stands as the first of its type on borrowing in Arabic. He studied English loanwords in the colloquial Arabic of Palestine (1917-1948) and Jordan (1948-1962). He has compiled a comprehensive list of foreign words in English used in colloquial Arabic in these areas; the list includes the
part of speech, Arabic equivalent, and the English headword for each item. He studied the effects of foreign words in English on Arabic in various linguistic fields such as phonology, morphology, syntax, and semantics. On the subject of this study, the results of Butros’ study show that four or five consonant phonemes, some consonant clusters, one or two diphthongs, and two short vowels are added to Arabic as a result of the phonological adaptation of loanwords.

Al-Athwary (2017) investigated the phonological modifications that English loanwords underwent in Modern Standard Arabic (MSA). Analyzing over 300 English loanwords, he found that the unfamiliar English phonemes are replaced by familiar ones in MSA, segment adaptation. Moreover, the results of the study revealed that the most regular adaptation, at the syllable level, is declusterisation, syllabic consonant conversion, consonant lengthening, and vocalic glide insertion. These processes are governed by the phonological system of MSA. The study also showed that the speakers of MSA mistakenly geminate certain English consonants because of the influence of MSA spelling-to-pronunciation correspondence on the one hand and the orthographic system of English on the other.

In the Saudi Arabic context, Mushait and Al-Athwary (2020) studied the morphology of English loanwords in Saudi Arabic (SA, henceforth). They investigated the adaptation of loanwords in terms of their inflectional affixes in number and gender. Analyzing 250 loanwords, the results of the study showed that the pluralization of loanwords follows the system of SA in which the Arabic broken (BP) plural, feminine sound plural (FSP), and masculine sound plural (MSP) are used in the adaptation process with the dominance of FSP using the suffixes {-haːt} and {-yaːt}. For gender inflection, the analysis showed that loanwords are used in both forms: feminine marked by {-ah} and masculine which is unmarked, following the patterns of SA.

Thomburg (1980) and Jarrah (2013) were interested in the phonological adaptation of loanwords in some Saudi dialects. Thomburg (1980) looked at 283 English words found in East District Saudi Arabic in terms of generative phonology. She not only looked at how English loans changed consonants and consonant clusters, but she also looked at how these changes affected Arabic phonology. He presented the word “borrowing rules” to explain a collection of phonological norms. Jarrah (2013), on the other hand, employed Optimality Theory to look at the phonology of English loanwords in Madina Hijazi Arabic. The article examines the phonological changes in syllable structure that occur in English loanwords often employed by Madina Hijazi Arabic speakers. The morphological integration of loanwords was not mentioned.

Another study that tackled loanwords in a Saudi dialect was conducted by Alhoody (2019). He studied the phonological adaptation of English loanwords into Qassim Arabic, a Saudi dialect (QA, henceforth). He investigated how the segmental patterns of loanwords are adapted in QA arguing that the inputs to QA are fully-specified English outputs serving as inputs to QA then the grammar of QA permits only the phonological features of input that are contrastive in QA to surface. The results of the study revealed that those English segments already available in QA are preserved faithfully, whereas the other English consonants which are not available in QA inventory are mapped to their phonologically closest QA consonants. Interested in the origin of loanwords in SA, Kashgary (2014) investigated the main sources of foreign loanwords in SA and found that English, French, and Italian constitute the major sources. The majority are English loanwords used mostly in science and technology followed by French loanwords used in fashions, etiquette, and arts, whereas the Italian loanwords are used when referring to opera and Christianity.

Researchers also mapped the adaptation of loanwords on some social factors such as age and gender. For example, Alahmadi (2015) studied the loanwords that are commonly spoken in Urban Meccan Hijazi Arabic
A STUDY OF ENGLISH LOANWORDS INTO TAIF ARABIC

(UMHA), a Saudi dialect. She investigated the extent of change, the source of loanwords, and the impact of the speaker’s age, gender, and level of education on the use of loanwords. Using a questionnaire, she collected data from 80 participants with age, gender, and literacy differences. Investigations have shown that most loanwords were borrowed from Turkish, followed by Persian and Italian. She attributed the reason for the Turkish words influence to the language contact resulting from the 400 years ruling of Saudi Arabia by the Ottoman Empire and the interaction with pilgrims who visit Mecca every year. The results also showed that there is a variation in the frequency of the use of loanwords in terms of the three variables: age, gender, and literacy. For example, old participants used loanwords more than young ones, males used loanwords more than females, and uneducated participants used loanwords more than the educated ones. Another study was conducted by Omar (2018) who explored the relationship between sex and the use of English loanwords in SA as realized in the frequency and morphological adaptations of these loanwords. As for frequency, the results of the study revealed that female speakers use English loanwords more frequently than male speakers for showing more prestige than the other gender. The results also showed that both genders share many morphological adaptations of loanwords with some differences.

Methodology

This study is both qualitative and descriptive in nature. This study’s participants are all native TA speakers of varying ages, genders, and educational levels. Students, family members, and friends were among them. Furthermore, the researcher is a native speaker of TA who serves as his own informant.

The researcher recorded casual speech of the participants talking about different topics of their choice and asked them to read a list of English loanwords to capture the way these loanwords are pronounced. The total number of loanword data is 190. Loanwords were posted using the IPA symbol. After the transcription, two TA native speakers, two linguists, were invited as an expert panel to check the form and confirm the loanword transcription. The researcher used the online Cambridge Dictionary to compare the pronunciation of the loanwords in DL and RL. They were categorized into two major groups: consonants and vowels with some sub-groups under each.

Findings and Discussion

In order to understand the reasons for the various changes that foreign words in English have undergone in TA, we need to start with the differences in the phonological systems of the two languages: English and TA.

Having a look at the inventory of phonemes of the English and TA, the English consonants /p/, /ŋ/, /v/, /ʃ/, /ʒ/ and /tʃ/ are not found in TA. Moreover, TA has only three short vowels whereas English has seven. TA has only three long monophthongs, whereas English has five. Diphthongs in TA are only four, whereas English has eight. As a result of these differences, the following English vowels are not found in TA: /ɒ/, /ə/, /ɜ/, /ɔɪ/, /əʊ/, /aʊ/, /aʊ̯/, /æʊ̯/, /læ/, /læ/, and /ɔː/. Another difference is that TA does not allow a syllable to begin with V, so any syllable must begin with a CV which results in that any foreign word whether English or any other language beginning with a vowel sound will be somehow problematic for Arab learners of that foreign language. To overcome such difficulty, they insert a consonant at the beginning of the word that begins with a vowel; the insertion of such onsets is to ease the pronunciation of the respected syllable which results in pronunciation errors caused by going in line with what is possible in the native language.
A third observation is that since all the letters of a word are pronounced in Arabic, i.e., there are no silent letters in Arabic, any foreign word has some doubled consonants, both consonants are pronounced by native speakers of TA, a process called consonant gemination.

Because of the foregoing disparities between the English and TA sound systems, several replacements, insertions, and deletions are found in English loanwords in TA to conform to the TA sound system. These processes are discussed below.

Substitution

The majority of loanwords adaptation is achieved by the process of substitution. Native speakers of TA replace an English sound with another sound that echoes familiar to them. Such a process seems to be governed by two reasons: either the English sound is not found in the TA phonemic inventory or the influence of the Arabic spelling-to-pronunciation correspondence.

Absence of the foreign sound from the native phonemic inventory. Some English sounds are not familiar to the TA speakers, they replace them by other sounds that are available in TA. For instance, the vowel /aʊ/ is replaced by /aʊ/ or /aʊ/ as in /fut/ “shock” and /rubxtaːt/ “robots” respectively. The diphthong /aʊ/ is not found in TA, so whenever encountered, it is replaced by another vowel such as /əl/, /uːl/, or /aʊ/ as in /sɔːjʊlmədʒa/ “social media”, /rβslɑːmufuːbjaːʔ/ “Islamophobia”, and /rβxtaːt/ “robots” respectively. Similarly, the diphthong /aʊ/ which does not exist in TA, is replaced by /æl/ as in /gɛnt/ “gear”. Some English consonants have also undergone the process of substitution. In TA there is only one bilabial stop which is the voiced one /b/, so whenever Arab learners of English, especially the beginners, come across the English /p/, they replaced it by its voiced counterpart /b/. As for English loanwords, the same process is used, i.e., /p/ is replaced by /b/. Examples of this kind of substitution include: /blɑːnət/ “plans”, /kʌmbliːt/ “complete”, /bɔːbɔːnt/ “PowerPoint”, /kʌtərbiːlər/ “caterpillar”, and /brɔːsl/ “press”. Another consonant substitution case is found in loanwords that have the /tʃ/ sound. Because /tʃ/ is not found in SA, it is replaced by /dʒ/ as in /kaːdʒuːl/ “casual”.

The influence of Arabic spelling-to-pronunciation correspondence. In Arabic, there is a one-to-one relationship between spelling and pronunciation, which implies that each written letter is pronounced the same way anywhere it appears. Native speakers of TA are influenced by the process of analogy with their native language when pronouncing foreign words, English loanwords are no exception. Examples of this process are found in /kʌmbliːt/ “complete” where /aʊ/ is replaced by /aʊ/ as influenced by spelling of the word “complete”. The same vowel, /aʊ/, is replaced by /aʊ/ as in /fɛsəzjʊmɑntəʔ/ “assignments”. For consonants, the /tʃ/ sound is replaced by /s/ as it appears in the pronunciation of the word “Islamophobia” so instead of /ɛlɔːməfaʊbə/, it is pronounced /ɛlɔːməfuːbjaʔ/.

Insertion

The influence of Arabic spelling-to-pronunciation correspondence. As already mentioned, in Arabic every letter of a word is pronounced. Thus, when it comes to foreign words where some letters are silent, native speakers of TA pronounce them especially the ones that are not always silent such as the letter “r” in RP. For example, in the word “PowerPoint”, the sound /r/ is inserted producing /bɔːbɔːnt/. The words /kʌtərbiːlər/ “caterpillar” and /tʃætər/ “tire” provide more examples. Another influence of the Arabic spelling-to-pronunciation relation is found in the English loanwords that have double consonants; both consonants are pronounced by TA native speakers such as the word “assignments” which is pronounced as /fɛsəzjʊmɑntəʔ/. 
Arabic phonological rules influence. In the Arabic phonology system, syllables cannot start with vowels; there should always be an onset. When TA speakers come across an English loanword that begins with a vowel sound, they always insert a glottal stop before the vowel. For example, /ʔɪtˌmel/ “email”, /ʔɪsləˈmjuːfəbja/ “Islamophobia”, /ʔadʒˈnda:t/ “agendas”, and /ʔəsəˈjɪmˌməntət/ “assignments”. Another constraint in TA is that an onset may consist of maximum CC-s, so speakers of TA find it difficult to pronounce syllables with onsets of more than two consonants. They, therefore, tend to simplify the cluster by inserting an anaptyctic vowel, a process known as declusterisation, to go in line with the phonological system of TA. In the data of this study, “split”, “sprite”, and “screen” are pronounced as /ˈsɪblt/, /ˈsɪbrət/, and /ˈsɪkərən/, respectively.

Deletion

The deletion process is found the least in the available data. A few examples of English loanwords show the deletion of some sounds. For example, in /kædʒˈwɜl/ “casual” the /j/ sound is dropped because it has no orthographic symbol, in /dɛmˈn/ “diamond” /z/ is dropped to reduce the triphthong to a diphthong because triphthongs are not used in TA; in this word, the final consonant is also dropped. Another deletion of consonants is found in /hæːz/ “hearts” in which, /t/ is deleted.

Conclusion

This study explored the phonological adaptations of English loanwords in TA. Analysis showed that foreign languages are adjusted at the segment and syllable levels. Certain segments underwent several phonological processes to comply with the TA system; when a loanword has a complex syllable, such a syllable is broken down into two syllables by inserting a short vowel between members of the cluster, declusterisation. The analysis has also revealed that the most common phonological process of adaptation is substitution, and the least is deletion; substitution is the highest because of the differences between the two languages, whereas deletion is not frequent due to the impact of Arabic spelling-to-pronunciation rules on the way they predict the pronunciation of any written foreign word, so rarely they omit a sound. The factors that determine how English loanwords are phonologically adapted in TA are attributed to TA phonological features, so it is the speakers’ first language that controls the adaptation process. The findings of this study can be of great benefit for Arab learners of English as Taif is the one of the most spoken languages in Saudi Arabia. Once they understand the phonological differences between the two systems, phonological errors will be minimized.

Further research into the adaptation of English loanwords into TA can be done from a morphological or semantic standpoint, mapping such adaptation processes on age, gender, degree of education of the speakers, and/or the situation (formal or informal).

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