ELF Annual Research Journal 19
(2017) 42-63

ELF
ANNUAL
RESEARCH
JOURNAL
http://elf.salu.edu.pk/

A Phonological Treatment of Vowels in English Loanwords By Saraiki Speakers

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ABSTRACT: *The current study explains acoustic analysis of vowels in English loanwords produced by Saraiki speakers. The complete phenomenon is described through acoustic analysis of three vowels /ɔ: ɒ ɜ/. The data collected from 30 illiterate participants were analyzed through SPSS and PRAAT software. Pictures downloaded from the internet were used as stimuli in order to collect data. Each stimulus was repeated four times but readings of the last three repetitions were analyzed. The results of the study explain how in all target English loanwords Saraiki speakers change native English pronunciation. The findings show that /ɜ/ vowel changes into /æ/ when produced by Saraiki speakers. The substitution of /ɔ:/ and /ɒ/ with /a/ is also observed in the pronunciation of Saraiki speakers. The study also explains different factors, which trigger changes in the pronunciation of English vowels by Saraiki speakers; these factors are the influence of L1, markedness and orthography.*

Keywords: Loanwords, pronunciation, substitution, Saraiki

Introduction

English is not only the language of the English and Americans but it is also the language of everyone, who speaks it (Kachru, 1990). English has established its unchallenged monopoly in the world. Therefore, it is not impertinent to say that in terms of politics, entertainment, education and technology, English has become the strongest international lingua franca (Brumfit, 1982; Crystal, 1997). British people were colonialist and the sub-continent was their Majesty's colony. They ruled with their culture, traditions, administrative and educational system. In this way, English established its strong position in the sub-continent. The people of the sub-continent were initially reluctant to accept anything associated with the British people and their language was not an exception. However, they soon realized the importance of the English language and started learning it. In this way, English made its way in the sub-continent. It is not only the sub-continent which is under the influence of English language, but throughout the world, it also has a strong influence. English learners are increasing day by day and

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according to Gradool (2006) by 2012, the English language learners would increase to two billion in the coming ten to fifteen years.

Pakistan is a multilingual country with Urdu as its national language. However, in official correspondence and educational institutions English has superiority over the Urdu language. In other words, officially English has replaced Urdu thoroughly (Rahman, 1996). In schools, media, courts, science, technology and higher educational institutions, English is used as a medium of instruction. However, our pronunciation of English is not native-like. It is because the non- native teachers and learners do not have access to native input and because of transfer of non-native accent to the next generations, many varieties of Pakistani English have emerged. Rahman (1990) claimed that Pakistani English has developed as a variety of English like other varieties i.e., Indian English, South Asian English etc. These are known as varieties because these are different from British and American English in terms of lexical, grammatical and phonological features (Crystal, 2004).

In Pakistan, languages from three different families, Indo-Aryan, Iranian and Dravidian are spoken. All Pakistani languages have used English words, which are known as loanwords. These loanwords are adapted in such a way that they seem to be a part of the host language. Some loanwords are need based but some are used as a fashion because English is considered a 'status symbol' among most of youth (Andrews, 1999). This is one of the reasons Pakistani speakers frequently use English loanwords. The adaptation and production of loanwords vary from one linguistic environment to another. It is because mostly in Pakistan, people are either bilingual or multilingual; therefore, apart from mother tongue, they use other languages as a medium of communication, which equally affects the lexical, grammatical and phonological features of English loanwords.

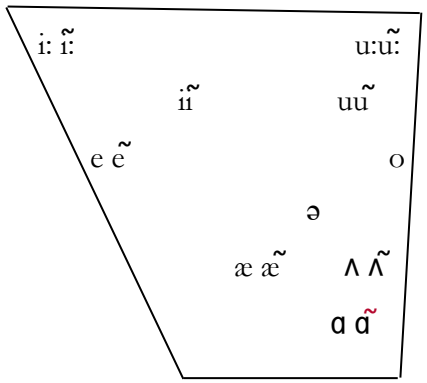
Saraiki is one of those Pakistani languages, which have intermingled English words in its vocabularies. Although Saraiki people use English loanwords they do not remain faithful to the input. They change some linguistic features when they produce English loanwords. Saraiki is one of the languages that belongs to Indo-Aryan family and is used in all four provinces of Pakistan. Saraiki is divided into six main varieties (Shackle, 1976) but the current study presents the adaptation of English vowels in loanwords in the central variety of the Saraiki language.

Saraiki is a rich language with having 66 phonemes (excluding diphthongs). In the vocalic inventory of the Saraiki language, there are 17 vowels among which 9 are oral and 8 are nasalized (Syed, 2013[1]). The vocalic

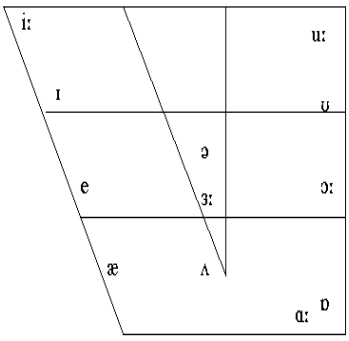
[1] But according to author there are 10 primary vowels in Saraiki as shown in the vocalic inventory of Saraiki.

inventory of Saraiki also shows long and short contrast of vowels as shown below.

Saraiki oral vocalic inventory[2]



On the other hand, English, has 12 monophthongs. English and Saraiki vocalic inventories have some similarities and differences. The main difference between English and Saraiki vowels is that Saraiki has oral/ nasalized contrast but in English, all vowels are oral. Saraiki has short and long contrast of vowels. However, English does not have this contrast. In English vowels are differentiated on the basis of feature [±ATR]. The quantity of English vowels is directly proportional to the tenseness of vowels. Tense vowels have relatively greater duration than the lax vowels but it is not a phonemic contrast in English. The vocalic inventories of both languages show that Saraiki lacks (/ɔ/, /ɒ/, /ɜ/) English vowel while English does not have any nasalized vowel. The following figure reflects the English vowels.



Vowels in English[3]

[2] In Saraiki /ɑ/, /e/, / o/ and /æ/ are long vowels in Saraiki. Since they do not have shorter counterparts, normally quantity symbol is not added with these vowels.

As different phonological changes occur during the adaptation of loanwords therefore, this study only focuses on the one linguistic area, i.e. 'change of vowel quality' during the adaptation of English loanwords in Saraiki. The purpose of selecting this area is to find out the different phonological changes, which occur in vowels during the process of adaptation. The study further explores the different factors, which directly or indirectly cause to change phonological structure of the English loanwords adapted by Saraiki speakers.

Literature review

The process of loanword adaptation is very common and natural in the world languages. Mostly, it is observed that the dominant languages remain donor but it is not a hard and fast rule that the donor will always be a dominant language. It is the quality of a living language that it spreads influence on other languages whether it is a dominant language or not. For example, English is a dominant language but it has also taken many loanwords from other languages. 'Bangle', 'bungalow' and 'cot' etc, are Hindi words but are commonly used in English. Similarly, other languages have adapted different English words and use them frequently. However, in Pakistan, the probability of English loanwords is greater than the loanwords adopted from any other language. It is because of the influence and use of English language in the different disciplines of life (trade, politics, and entertainment).

Loanwords emerge, because of language and cultural contact (Weinreich, 1963). This social and cultural contact may be in the domain of religion, education and politics (Hill & Hill, 1986). This is very natural and gradual process as a result of which loanwords become part of receiver's L1 (Bloomfield, 1933). These loanwords are adjusted phonologically, grammatically and morphologically into the host language (Bloomfield, 1933; Sankoff et al., 1990). It is because of the difference between the donor's and the host language's phonology. Loanwords are adapted in two ways; one is 'pure' and second is 'adjusted' (Fantini, 1985). It means those words, which retain all native features are called 'pure' and those, which are adjusted according to the speaker's language structure, are known as 'adjusted' loanwords. All loanwords are considered in the second category (adjusted) because it is very difficult to produce foreign words retaining all their native linguistic features. There could be many reasons of adapting loanwords but the most important reason is the 'semantic gap'. It means when sometimes

[3] URL: *https://www.llas.ac.uk/materialsbank/mb081/page_10.htm.*

one language does not have the same words as they have from other languages, they adopt, which gradually and slowly become part of their L1 and are known as loanwords. For example, in Pakistani language, the word 'petrol' is used because of a semantic gap, as there is no equivalent in Pakistani languages.

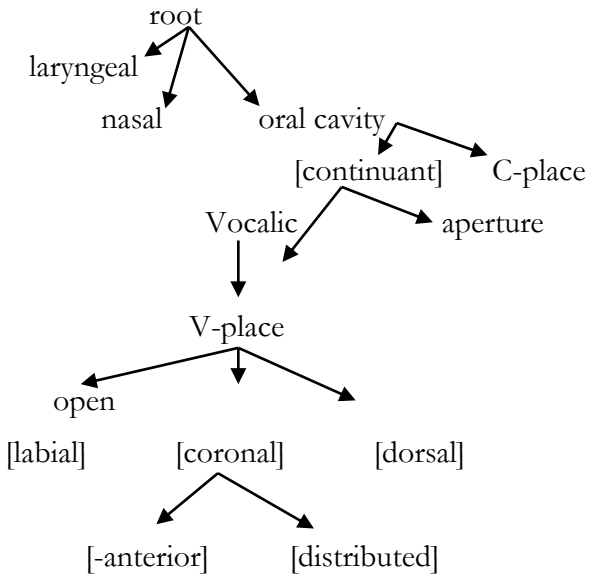
It is also a fact that the use of these loanwords in a language varies from speaker to speaker and affects the semantic structure of the word (Romaine, 1995). This affected semantic structure may be a result of interference of the speaker's L1, age, community, interaction and environment. Similarly, the frequency of adaptation of loanwords also varies from word to word, for example, nouns are frequently adapted words (Andrew, 1999) while syntax is the least borrowed component of a language (Romaine, 1995). It is because some structures or words are considered as ill-formed in the receiver's native language and the already existing sound pattern of L1 does not allow the new sounds and structure.

It is also observed that mostly vowels change their quality or quantity when non-native speakers produce them. Mostly vowels are voiced but in some languages, a voicing contrast of vowels also exists. Articulatory gestures are not exposed in the production of vowels that is why it is difficult to differentiate in their articulation. It is because listeners of recipient languages pay little attention to the production of vowels, confusion in the identification and differentiation remains mostly in vowels, and they are mostly substituted by phonetically closer sounds of native grammar (Hock, 1991). Another reason for substitution is the absence of an adopted phoneme in the phonemic inventory of the recipient's language. The consonants, which are not attested by native phonology are deleted or substituted in the loan adaptation. Similarly, in the case of vowels, they are substituted with the vowels of native language of speakers and preserve the maximum input but never delete in loanword adaptation (Yip, 1993). For example, Mahmood et al, (2011) explain the loanword adaptation of English in Punjabi. According to them English word road' /rəʊd/ is adapted as /ro:d/ by Punjabi speakers. Here the Punjabi speakers, in order to make the words accord to their native phonology, use substitution as a repairing strategy. Similarly, Hussain (2011) explains that both Urdu and Punjabi speakers substitute English vowels (ɒ, ɔ: ,ɜ:) with their native vowels (a:, o: , ə) respectively. The following examples illustrate the process of substitution of vowels;

English	Urdu	Punjabi
/kɒpɪ/ Copy’	/k**a:**pɪ/‘	/k**a:**pɪ/
/bɔ:d/ board	/**bo:**rd/	/bo:d/
/tʃɜ:tʃ/ church	/tʃ**ər**tʃ/	/tʃ**ər**tʃ/

In the above examples, vowels are substituted, based on perceptual similarity. Another change is the insertion of /r/ along with the change of vowel. But this is not a matter of discussion in this article. However, sometimes the substitution process involves the differences of phonemic inventories of two languages.

The current research is designed to explore the processes and reasons for accepting and modifying different English vowels. This study is analyzed through the feature geometry model of Clements and Hume (1995). It explained the C-place of consonants and V-place of vowels, separately .Clements and Hume (1995) model is explained below.[4]



The following section explains the population, sample and sampling techniques used for data collection. Stimuli and target sounds are also discussed in this section

[4]The current research only focuses on vowels; therefore, C-place node is deleted and only V-place is show in the figure.

Research Methodology

This study presents an acoustic analysis of vowels in English loanwords adopted by Saraiki speakers. The study focuses on the first three formants (F1, F2, and F3) which are very necessary to understand the nature of vowels. The paradigms of vowels are determined by measuring values of these formants. For the current research, only three vowels were taken because the loanwords carrying these vowels are mostly used by Saraiki speakers and don't have their alternative words in Saraiki. Three different words carrying each vowel were selected as stimuli. This chapter presents the results, analysis and presentation of data. PRAAT (Boersma & Weenink, 2012) software was used to note the required formants values (F1, F2, and F3) manually. These values were further analyzed through SPSS in order to determine the required values (mean, std. deviation). The first formant (F1) represents the height of vowels (low vowels have greater F1). The second formant (F2) differentiates the front and back vowels. The F2 of the front vowels is relatively greater than the back vowels and the F3 (third formant) determines the involvement of lip-rounding. The vowels, which have [+round] feature show low F3 value. The formant values of all three monophthongs were taken from Saraiki male illiterate participants and compared with the formants values of British speech recorded by Deterding (1997). The significance of difference between formant values of English and Saraiki speakers were determined through p value of the test against a standard of .05. If the p-value is above .05 then the differences are considered non-significant which means that there is no meaningful difference between the two means. A significant difference between the two sets of data is assumed if the p value is less than .05.

A picture naming task was used for getting participants' productions. A Q mobile z10 was used for recording. Before recording the stimuli, the participants were briefly informed about the procedure of recording. Each stimulus was repeated four times in order to assure that the participants are pronouncing the names of pictures in a natural way. The recording device was kept in front of participant's mouth at the distance of 9-12 inches in order to record their voice clearly. Only illiterate native Saraiki speaking participants were selected for the current research because educated Pakistanis are also under the influence of Urdu and in their speech it becomes difficult to take apart the effect of Urdu and English.

Target Sounds

For current research, only 3 vowels were selected because in Saraiki language, these sounds are missing. The participants were asked to repeat each word four times but for analysis, only three repetitions were taken and their first production of each word was excluded because of the probability

of nervousness of the participants. These target sounds, along with the carrier words are given in the table below:

Sounds	Words
/ɜ/	Pencil, cigarette, petrol
/ɔ:/	Ball, call, shawl
/ɒ/	rocket, copy, frock

List of stimuli

Paradigms of data analysis

The data was analyzed through PRAAT software. The purpose of analysis was to determine the differences between productions of English native speakers and Saraiki speakers. The following subsections explain the paradigms and hypotheses used for analysis of the target sounds.

Hypothesis 1

The hypothesis is that, if Saraiki speakers produce [ɜ] as a short front vowel [i], the F1 of their vowels in the loanwords must be lower than that of the English speakers in the target /ɜ/ sound and if [ɜ] is produced as [æ] F1 must be higher.

Hypothesis 2

The second target sound for analysis is /ɔ:/ vowel. It was assumed that Saraiki speakers substitute this sound with /a/; therefore, F1 and F3 of the Saraiki speakers will be greater than that of the English native speakers. It was also hypothesized that the F2 of English speakers will be relatively greater than that of the Saraiki speakers.

Hypothesis 3

It is noted that Saraiki speakers also change the sound /ɒ/ into /a/. Therefore, it is hypothesized that F2 of English speakers will be relatively greater than the Saraiki speakers and F1 and F3 of the Saraiki speakers will be higher than those of the English speakers in production of this vowel. It is because /a/ is at lower position than /ɒ/.

The results are produced and analyzed in the following section.

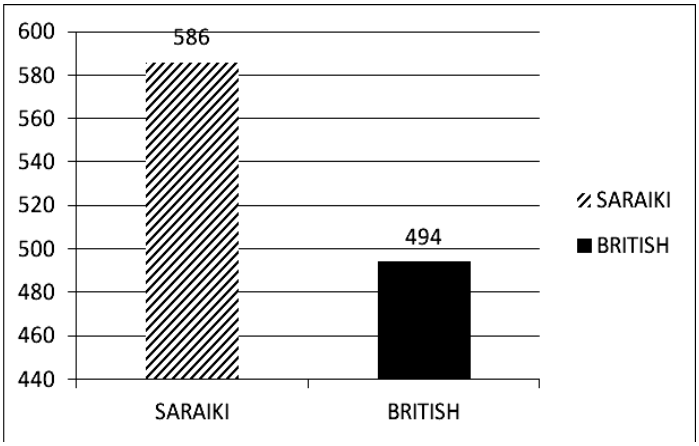
Data analysis

In the following subsections, the data are presented and analyzed. Each subsection is based on the formant values of one of the target vowels.

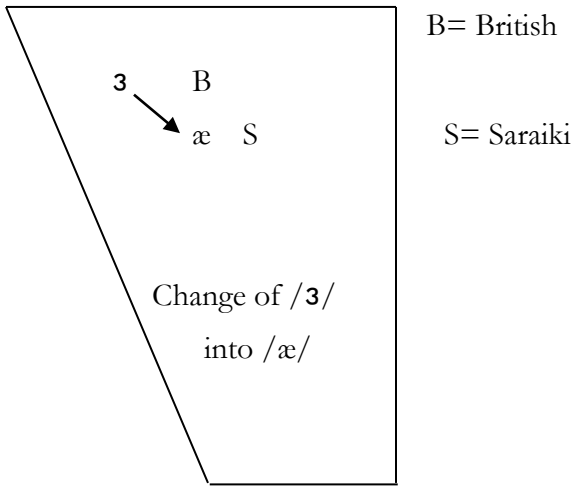
English mid vowel /ɜ/

In English /ɜ/ is an unrounded mid-front vowel. In order to see how Saraiki speakers produce these vowels in loanwords, three words (pencil, petrol, and cigarette) were used as stimuli and it was hypothesized that the Saraiki speakers would replace /ɜ/ vowel with /æ/ vowel. Although both these are front vowels, the main difference between them is that of tongue height, the vowel /ɜ/ is at higher position than the /æ/ vowel. In other words, when the Saraiki speakers produce the words containing /ɜ/ vowel they change the [-low] feature into [+low]. The native Saraiki speakers in their speech frequently use these words and the change of features changes the way of pronunciation of Saraiki speakers. The difference of pronunciation is determined by studying the first formant of the vowel. It is because F1 reflects height of vowels. The position of the tongue in the production of /ɜ/ is relatively higher than in /æ/. The F1 of low vowels is greater than the higher vowels. In other words, F1 value is inversely proportional to the height of vowels. The acoustic analysis of the /ɜ/ vowel shows that the first formant of the relevant vowel in the words 'pencil' (mean=570, std.dev.= 61) 'cigarette' (mean=619, std.dev.= 56) and 'petrol' (mean= 570, std.=52) is different from the first formant of /ɜ/ in productions of British speakers (mean= 494). The quantitative data analysis shows that there is a significant difference (t-= 10.64, p-=.001) between the mean F1 values of both the British and the Saraiki speakers. It means Saraiki speakers produce an / ɜ / sound which is lower than the vowel produced by British speakers. It is evident from the fact that the mean F1 frequency of Saraiki speakers is greater than the mean F1 value of the British speakers. The difference of formant values are reflected in the graph.

Frequencies of F1 of British and Saraiki speakers for /ɜ/



The above graph indicates that the mean frequency of F1 of Saraiki speakers is greater than British speakers. This difference in the frequencies of both British speakers and the participants of this study shows the difference of height of vowels. It is clear from the analysis of the stimuli containing /ɜ/ vowel that Saraiki speakers substitute /ɜ/ vowel with /æ/ which is according to our hypothesis. The substitution of vowels is shown in the figure below:



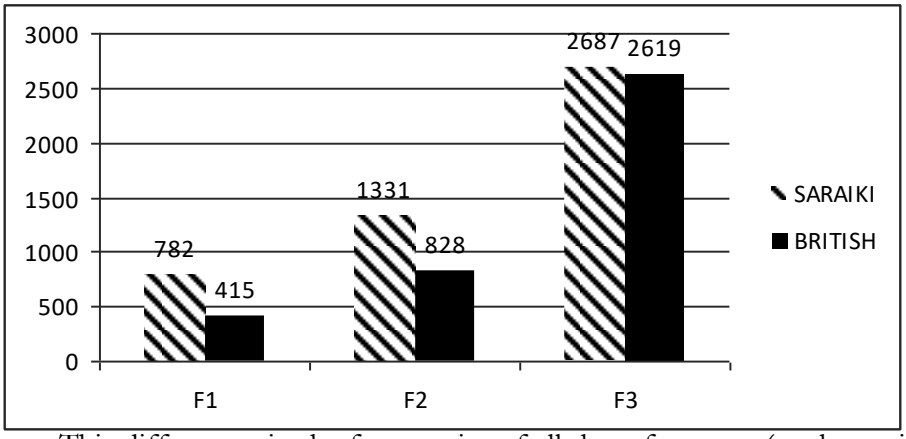
Back vowel /ɔ:/ In British English /ɔ:/ is a mid-low back vowel. It was hypothesized on the basis of observation that Saraiki speakers produce the low-back vowel /ɑ/ instead of /ɔ:/. Therefore, it was also assumed that the F1 and F3 of these vowels produced by the Saraiki speakers would be greater than that of the British speakers. However, the F2 of British speakers should be greater than that of the Saraiki speakers, because /ɑ/ is a lower and more open vowel than /ɔ:/.

Different loanwords 'ball', 'call' and 'shawl' were selected for analysis and first three formants (F1, F2, F3) were taken for analysis. The results of the target sounds indicate that F1of the Saraiki speakers of these words (ball, mean=776, std. =62: call, mean= 781, std. =63: shawl, mean= 790, std. = 52) is different from the British speakers (mean F1= 415). In order to compare the values of the Saraiki and British speakers a one sample t-test was applied. The results indicate that the mean F1 of the Saraiki speakers for the stimuli ball (t-value= 31.4, p-value=.001) call (t-value= 51.6, p-value= .001) and shawl (t-value= 56.3, p-value=.001) are significantly different from that of the British speakers. The results also show that there is an overall significant difference (t-value= 35.14, p= .001) between the mean F1 formant of both

the British (mean=415) and the Saraiki speakers (mean=782) of the target sounds.

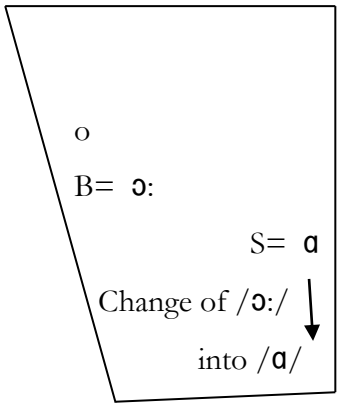
Although, the F2 is directly related to the front position of the tongue but the constriction in the vocal tract created by lip rounding decreases F2 value. This is the reason that the mean F2 value of British speakers (mean F2=828) is lower than the Saraiki speakers in the target sounds (mean F2=1331, std. =45). Similarly, the third formant (F3) reflects the involvement of lip rounding in the production of vowels. The mean values of both Saraiki (mean= 2687) and British (mean= 2619) speakers show an insignificant difference (t-value=1.877, p-value=.071). The results show that the value of F3 of the British speakers is lower than Saraiki speakers. The difference of all three formants of British and Saraiki speakers is explained in the diagram below:

Formant frequencies of Saraiki and British speakers for /ɔ:/



This differences in the frequencies of all three formants (as shown in the graph above) indicate that Saraiki speakers produced a vowel which is lower than the British /ɔ:/. It is because the lower vowels have greater F1 than the mid and high vowels. Similarly, the frequency of the second formant (F2) of the Saraiki speakers which determines the front- back dimension of vowels, is greater than the British speakers in production of the /ɔ:/ sound. The British /ɔ:/ vowel is more towards front than the vowel which is produced by the Saraiki speakers in the target words. The reason behind the low F2 of British English speakers is the presence of feature lip-rounding in this vowel. It is because the Saraiki speakers produced it as an open vowel while English speakers produced it with the involvement of lip rounding. The difference of formant F3 also shows that the British /ɔ:/ loses its [+round] feature when it is produced by the Saraiki speakers in the loanwords. The second feature which is absent in the Saraiki speakers in the target words is [+ATR]; therefore, they produced /ɑ/ an open vowel.

The measurement of the /ɔ:/ vowel indicates that the F1 and F2 values of the Saraiki speakers are significantly different from the British formant values and are relatively closer to the values of British /a/ vowel which proves our hypothesis. The slight difference of third formant (F3) between Saraiki and the British speakers also makes it clear that /ɑ/ is an open vowel but a lip rounding feature is involved in the production of /ɔ:/ by British speakers. Another reason for this difference is the quantity of the vowel, Saraiki speakers produced /a/ vowel, which is not as long as it is observed in the British speaker's pronunciation (as in the word 'father'). Substitution of /ɔ:/ with/a/ is explained in the figure below:



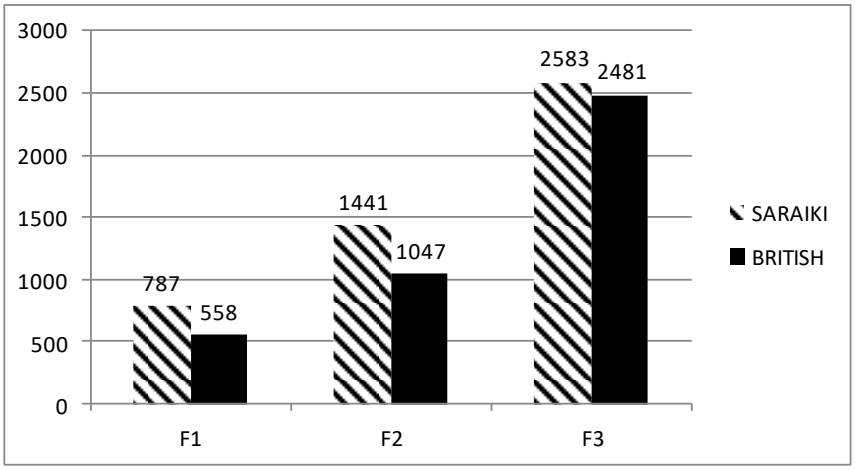
Low-front vowel/ɒ/

In British English, /ɒ/ is a low front vowel and is used in many loanwords in Saraiki. When this vowel is produced by Saraiki speakers in different loanwords, it was hypothesized, the Saraiki speakers produce /ɑ/ vowel instead of /ɒ/. Therefore, it was presumed that the F1 and F3 of Saraiki speakers will be greater than British speakers but in contrast the frequency of F2 of British speakers will be relatively greater than Saraiki speakers. Although both are low vowels but there are some differences in the position of both vowels. The vowel /a/ is relatively lower than the /ɒ/ and /ɑ/ is a low back vowel while /ɒ/ is at low front position. In order to test the hypothesis three English words (copy, frock, and rocket) were recorded and analyzed. Keeping in mind the differences between the /ɒ/ and the expected output sound by the participants, the values of first three formants (F1, F2, and F3) were noted.

It is noted in the analysis that the mean values of F1 of target sounds of the Saraiki speakers (copy, meanF1=785, rocket, meanF1=785, frock,

meanF1=794) is greater than the mean value of F1 of the British speakers (mean F1=558). The mean value of F2 of all three stimuli of the Saraiki speakers (mean=1441) is greater than the British F2 mean value (mean=1047). The results indicate that the value of F3 of Saraiki speakers in the target sounds is greater than the mean value of British speakers in the target vowel. The mean values of the stimuli of the Saraiki speakers (copy meanF3=2595, frock meanF3=2597, rocket meanF3=2558) is greater than the British speakers (meanF3=2481). The difference of results of all three formants is reflected in the graph.

Frequencies of first three formants of British and Saraiki speakers for /ɒ/



The analysis of the target words shows a significant difference (t-value= 21.04, p-value= .001) between the F1 mean values of British and the Saraiki speakers. The difference of F1 in the production of target sound leads to the conclusion that Saraiki speakers produce the sound, which is lower than the sound produced by British speakers. It is because greater F1 value indicates that the vowel is relatively at lower position than the one, which has lower F1 value.

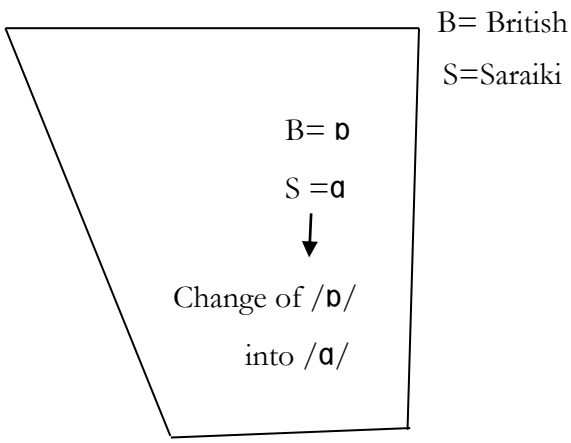
Similarly the measurements of F2 of the Saraiki speakers indicate that there is a significant (t-value= 21.5, p-value= .001) difference between the mean values of both British and Saraiki speakers in the production of target sound. The second formant indicates the front and back position of a vowel. Although the vowel /ɒ/ is at front position and should have greater F2 value but in the production of /ɒ/ the feature [+round] is also involved which decreases frequency of F2. The greater value of F2 of the Saraiki speakers shows that they produced the vowel, as more front and unrounded than the vowel produced by the British speakers in the target words. The difference in

the mean values of F3 of Saraiki (mean=2583) and British (mean=2481) speakers also makes it clear that lip rounding feature is involved in the production of /ɒ/ when it is produced by British speakers but Saraiki speakers produce it with an open jaw.

The analysis of the data indicates that the frequencies of F1, F2 and F3 of the Saraiki speakers are greater than the British speakers, which further indicate that the vowel, as the Saraiki speakers produce it, is lower, more towards front and is an open vowel than that produced by the British speakers in the target sound. The difference in the F1and F2 in terms of Feature Geometry indicates that the Saraiki speakers produced a [+low] [-round] and [+back] vowel (/ɑ/) while British produced a [+low] [+round] and [+back] vowel (/ɒ/).

The analysis of F3 (t-value= -1.008, p-value=.322) shows an insignificant difference between the two mean measurements. F3 reflects the involvement of lip rounding. In other words, the difference of lip-rounding between Saraiki and British speakers in the target vowel is not so significant. It is because the /ɒ/ vowel has a little constriction in the oral cavity while Saraiki speakers produced an open vowel /ɑ/. Another feature which makes the two (/ɑ/, /ɒ/) vowels different from each other is the feature [+ATR]. Advance tongue root (ATR) feature is present in British speakers in the target vowel while Saraiki speakers lack this feature in their vocalic phonemic inventory. Because of the absence of feature [ATR], Saraiki speakers produce the closest sound /ɑ/, which is an open vowel.

The description of all three formants from the results indicates that Saraiki speakers produce /ɑ/ vowel instead of /ɒ/, which is according to the hypothesis. The process of change of vowels is shown in the figure below



Discussion

In the above results, it is clear that in the process of loanword adaptation, Saraiki speakers change the original pronunciation of the English words. The target sounds, which were selected for the current research, go through phonological changes when produced by Saraiki speakers. Saraiki speakers produce /æ/ instead of /ɜ/ in English loanwords. Similarly they change the pronunciation of /ɒ/ and /ɔ:/ vowels and produce these as /a/. The results of the /ɜ/ vowel indicate that Saraiki speakers substitute /ɜ/ with /æ/ vowel. Both these are front vowels but the main difference is that of height of tongue. /ɜ/ is produced with tongue at relatively higher position than /æ/ vowel. The simple answer to why participants substitute /ɜ/ vowel in the loanwords is that the sound system of Saraiki language does have /ɜ/ and there is a difference between the heights of vowels that is why they substitute English /ɜ/ with another vowel existing in their phonemic vocalic inventory.

Similarly, the same phenomena is observed in the production of /ɔ:/ vowel which is substituted with an open vowel /ɑ/. There could be many reasons for this; first and the most important reason is that /ɔ:/ vowel is absent in Saraiki language and the speakers substitute it with the vowel which is closer to /ɔ:/ sound in their phonemic inventory. Again a question rises that why they substitute it with /ɑ/ and not with /o/ which is also a closer to /ɔ:/? The answer to this question is markedness. The /ɑ/ vowel is relatively more unmarked than /o/. Therefore, Saraiki speakers produce the most unmarked and the closest sound for the target vowel.

Other reasons behind the substitution of /ɔ:/ with /ɑ/ vowel in production of the target sounds are orthography and input. Mostly the use of the English loanwords in Pakistan starts from literate people and slowly and gradually, these words become a part of conversation of illiterate people. Therefore, the literate people read these words which are in written form (not in phonetic transcription) or in the form of natural speech by native speakers. In orthography, the letter 'a' which represents the /ɔ:/ vowel in English is often produced as /ɑ/ sound. Another reason is that in Pakistan the environment and the input are not native-like. People use English loanwords as they read them from books without any knowledge of phonetics and phonology and transfer them to the next generation. This cyclic transfer of English words in generations of Pakistanis indigenizes the words of English according to the phonology of Pakistani languages. Therefore, Pakistani speakers of English rely only on the input obtained in non-native environment and produce these words as they receive. Because of

these reasons Saraiki speakers substitute the vowel /ɔ:/ with the vowel /ɑ:/.

The results and analysis of the production of /ɑ/ instead of /ɒ/ leads to the conclusion that every language has different phonemic inventory. The Saraiki language has a different phonemic inventory than that of English but there are some similarities between these languages. As far as the target vowel /ɒ/ is concerned it is not a part of Saraiki language. It is a standard practice throughout the world that if a sound is not present in the native language it is substituted with the nearest sound of its own phonemic inventory. Here Saraiki speakers do the same they substitute the sound /ɒ/ with /a/ which is the closest sound in their phonemic inventory.

Although the two vowels /ɑ/ and /o/ are the closest vowels to /ɒ/ and both have an equal chance of substitution, the speakers in this study selected /ɑ/. It is not a matter of preference; rather it is a matter of availability of vowel and ease of articulation. The /o/ vowel is more marked than /a/ that is why they go to the next relatively unmarked and the closest sound. Besides this, another important factor is that a Saraiki speaker's input is not similar to a native speaker's. In Pakistan Urdu is used as a national language and most English loanwords (e.g. copy, frock, rocket etc) do not have their alternatives in Urdu or any other Pakistani language. In other words, these are known as original words of Urdu with different pronunciation (/kapi/, /rakit/) and people receive this input instead of native British English pronunciation. This is the reason Saraiki people pronounce English words under the influence of Urdu as well as with the interference of native language. Another reason for the change of pronunciation is the insignificant difference of third formant of both Saraiki and British speakers in the production of /ɔ:/. Because of this, Saraiki speakers perceive this vowel as open vowel.

Findings

The results and analysis of all stimuli show that the pronunciation of Saraiki speakers in target English loanwords is strongly different from the original /native pronunciation. The analysis also shows that this difference of pronunciation is because of different factors. Some of these factors which strongly influence the pronunciation of loanwords are the involvement of Urdu and English orthography, interference of L1 and markedness. The most important reason, which is noted in the analysis, is the involvement of a third language Urdu that in the current scenario plays the role of mediator between English and other local languages of Pakistan. In Pakistan Urdu is the national language, which has a great influence on all indigenous languages. Like other Pakistani languages, Urdu also does not have alternatives of English loanwords. These loanwords are written in Urdu

orthography and literate people pronounce these English loanwords like Urdu words. Although the present study focuses on illiterate people, it is also a fact that these loanwords come from literate people. So the illiterate people follow the pronunciation of literate people which is also not native like but in some words the illiterate people further change this non-native pronunciation because of the interference of L1.

Markedness is also one of the major factors, which are responsible to change native pronunciation. In the current study, the process of substitution occurs and marked sounds are substituted with the unmarked ones. Some sounds may be unmarked in one language but they are changed when produced by non-native speakers because they are considered more marked for foreigners. However, in the present study some vowels are also substituted with other vowels which are relatively more unmarked than the target vowels. This substitution results in a change from the original pronunciation of words.

One of the most important factors in this regard is interference of L1, which influences pronunciation of loanwords. As Flege (1987) explains that because of 'equivalence classification', learners cannot perceive a difference between the L1 and L2 phonemes and the already existing sound pattern of L1 prohibits accurate realization of the new sounds received in loanwords. It is obvious that the interference from the L1 causes misperception of the non-native sounds and this misperception results in change in the original pronunciation.

The current study also identifies many factors, which directly or indirectly influence perception. These factors are interference of L1, markedness, knowledge of donor's language phonology, role of orthography of donor and national language (Urdu in Pakistani context).

Conclusion

The role of L1 is very crucial because it is the sound system of L1, which resists acquisition of new L2 sounds. Similarly, markedness does not allow those sounds which are considered more difficult for speakers. Another factor is the role of orthography. Saraiki speakers produce sounds according to the orthography instead of following the actual pronunciation, which results in change of the original pronunciation. The results of the study depicted that the pronunciation of Saraiki speakers was different from the BrE speakers. The results and discussion leads to the following conclusions;

Firstly, the English vowel /ɜ/ is absent in the Saraiki language and is substituted with /æ/ by Saraiki speakers in English loanwords. Saraiki

speakers produce the English words containing /ɜ / vowel with the [+low] feature while BrE pronounce it as mid-high vowel.

Secondly, the vowel /ɒ / is a low back vowel and /ɔ :/ is a low-mid back vowel in BrE but both are substituted with low back /ɑ / vowel by Saraiki speakers. Here Saraiki speakers lack the [+round] but retain the [+low] feature in the production of sounds containing /ɒ / and /ɔ :/ vowels.

From the above results, it can be generalized that Saraiki speakers substitute the marked sounds with relatively unmarked ones. They prefer /ɑ / low vowels in the process of substitution because low vowels are relatively less marked..

A Comparative study of educated and uneducated Saraiki people can better explain the influence of L1 and other social factors on loanword adaptation in Pakistan.

As this study is limited to the central variety of the Saraiki language, therefore, similar studies on other varieties of Saraiki can also help to understand the real nature of loanword adaptation.

References

Andrews, D. R. (1999). *Sociocultural Perspectives on Language Change in Diaspora: Soviet immigrants in the United States.* Amsterdam and Philadelphia: John Benjamins Publishing Company.

Bloomfield, L. (1933). *Language.* New York: Holt, Rinehart and Winston.

Boersma, P., & Weenink, D. (2012). Praat: *doing phonetics by computer.*

Brumfit, C . (1982). *English for International Communication.* Oxford: Pergamon Press.

Charette, M. (1991).*Conditions on Phonological Government*. Cambridge: CUP.

Clements, G. N., & Keyser, S. J. (1983). *CV phonology*. Cambridge, Mass.: MIT Press.

Clements, G. N., & Hume, E. V. (1995). The internal organization of speech sounds. In J. Goldsmith (Ed.), *A handbook of phonological theory* (pp. 245-306). Oxford: Blackwell.

Crystal, D. (2004). *The language revolution.* Cambridge: Wiley-Blackwell.

Crystal, D. (1997). *English as a global lang*uage. Cambridge*:* Cambridge University Press.

Davis, S., & Mee-Hui C. (2006). Phonetics versus phonology: English word final /s/ in Korean loanword phonology. *Lingua* 116, 1008–1023.

Deterding, D. (1997). The formants of monophthong vowels in Standard Southern British English pronunciation. *Journal of the International Phonetic Association* 27, 47–55.

Dohlus, K. (2005). Phonetics or phonology: Asymmetries in loanword adaptations–French and German mid front rounded vowels in Japanese. *ZAS Papers in Linguistics*, *42*, 117-135.

Fantini, A. E. (1985). *Language Acquisition of a Bilingual Child: A Sociolinguistic Perspective (To Age Ten). Multilingual Matters 17*. Clevedon: Multilingual Matters.

Flege, J. E. (1987). The production of 'new' and 'similar' phones in foreign language: evidence for the effect of equivalence classification. *Journal of Phonetics 15*, 47-65.

Graddol, D. (2006). *English next: Why global English may mean the end of English as a foreign language*. British Council.

Hill, J.,& Kenneth, H. (1986). *Speaking Mexicano.* Tucson, Arizona: The University of Arizona Press.

Hock, H. H. (1991). *Principles of historical linguistics.* New York: Mouton de Gruyter.

Hussain, Q. (2011). *Phonological changes of English words borrowed into Punjabi via Urdu*. (Unpublished BS Hons. Dissertation). Government College University, Faisalabad, Pakistan.

Kachru, B. B. (1990). *The alchemy of English: The spread, functions, and models of non-native Englishes*. Illinois: University of Illinois Press.

Kenstowicz, M. (2003a). *Salience and similarity in loanword adaptation: A case study from Fijian*. Unpublished manuscript, MIT. Retrieved August 11, 2005, from http://web.mit.edu/ linguistics/www/ kenstowicz/kenstowicz-'03.pdf

Kenstowicz, M. (2007). Salience and Similarity in Loanword Adaptation: a Case Study from Fijian. *Language Sciences* 29, 316-340

Kim, H. (2009). Korean adaptation of English affricates and fricatives in a feature-driven model of loanword adaptation. 55-180.

Mahmood, R., Hussain, Q., & Mahmood, A. (2011). Phonological adaptations of English words borrowed into Punjabi. *European Journal of Social Sciences*. 22 (2). 234-245.

Miao, R. (2006). *Loanword adaptation in Mandarin Chinese: Perceptual, phonological and sociolinguistic factors*. Ph.D. dissertation, State University of New York, Stony Brook.

Rahman, T. (1990). *Pakistani English: The Linguistic Description of a Non-native Variety of English* (Vol.3).Islamabad: National Institute of Pakistan Studies, Quaid-e-Azam University.

Rahman, T. (1996). *Language and politics in Pakistan*. Karachi: Oxford University Press.

Romaine, S. (1995). *Bilingualism*. 2nd ed. Oxford: United Kingdom and

Cambridge, Mass.: Blackwell.

Sankoff, D., Poplack, S., &Vanniarajan, S. (1990). The case of the nonce loan in Tamil. *Language variation and change*, *2*(01), 71-101.

Shackle, C. (1976). *The Saraiki language of central Pakistan: a reference grammar*. London: School of Oriental and African Studies (SOAS).

Syed, N. A. (2013). Voice onset time for plosives in Saraiki: Implications for the acquisition of English aspiration contrast. *EFL Annual Research Journal* Shah Abdul Latif University Khairpur, 14, 1-15.

Weinreich, U. (1963). On the semantic structure of language. *Universals of language*, *1*, 142-215.

Yip, M. (1993). Cantonese loanword phonology and Optimality Theory. *Journal of East Asian Linguistics* 2, 261–291.