Phonemic Variation of Urdu Loanwords in Standard British English

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Borrowing is one of the most common sources of new words in languages and loanwords are one of the types of borrowings across language boundaries. The English language has adopted many words from other languages throughout history. In this process, loanwords sometimes undergo certain variations. The present study is about phonemic variation of Urdu loanwords in standard British English. A list of 135 Urdu words of daily use that English has borrowed was compiled purposively from *Oxford Advanced Learners' Dictionary, 10th ed.* (2020) for analysis. All words in the list were transcribed into IPA. Urdu pronunciation was checked from ("*Urdu Lughat*," 2017) and *Farhang-e-Talaffuz* (2017) whereas English pronunciation was checked from *Oxford Advanced Learners' Dictionary 10th ed*. (2020) and a comparison was made to highlight phonemic variation. Analysis of data indicates that almost one third loanwords retain their pronunciation and among the rest, the majority of words undergo change of vowel sounds whereas others either change a consonant sound or vowel and consonant both in some cases.

Key words: *loanwords, phonemic variation, standard British English, Urdu*

1. INTRODUCTION

1.1 Background to the study

Language contact is a very common phenomena and in a contact situation, one language influences another that results in linguistic change at different levels such as phonology, morphology, syntax and semantics etc. One such change is linguistic borrowing that is one of

the most common sources of new words in languages. It refers to the process whereby speakers introduce words from one language into another (Trudgill, 1992) and these borrowings are usually known as loanwords (Crystal, 2008).

According to Dictionary.com (2020) English is one of the most incredible, flavourfully complex melting pots of loanwords from other countries that's been left to simmer for centuries. It has been borrowing words from other languages since its infancy. French, German , Greek, Spanish, African languages and Japanese are prominent donor languages to English as cited by Bielenia-Grajewska (2009). Other languages also contribute loanwords into English. In this regard Dictionary.com (2020) states, "*As many as 350 other languages are represented and their linguistic contributions actually make up about 80% of English*". The present study is about Urdu loanwords and the phonemic variation they undergo into English Language.

1.2 Statement of the Problem

The English language has borrowed a lot of words from other languages. These loanwords undergo certain changes. The present study is about nature and phonemic variation of Urdu loanwords into standard British English.

1.3 Aims and Objectives

The objectives of the research are:

1) To find Urdu loanwords in standard British English
2) To identify phonemic variation of Urdu words in standard British English

1.4 Research Questions

The research answers following questions based on the objectives of the study:

1) Which Urdu words have been borrowed in standard British English?
2) Which phonemic changes do Urdu loanwords undergo in English language?

1.5 Significance of the Study

The present study is significant, because it focuses on phonemic variation of Urdu loanwords into standard British English. Earlier studies have explored loanwords and borrowing from English language to other languages or language varieties. Few studies have explored borrowings or loanwords into the English language and it makes the present study unique and different from previous studies. Moreover, it may urge linguists to explore loanwords from other languages into standard British English.

1.6 Limitation of the Study

The research is limited to explore Urdu loanwords into standard British English and is delimited to a list of 135f words of daily use to see phonemic changes they come across in English. Changes at other linguistic levels i-e semantics, pragmatics are not the focus of the study.

2. LITERATURE REVIEW

Urdu is an Indo-Aryan language and is spoken mainly in South Asia. It is native to Pakistan and India. It serves as national language of Pakistan and is spoken by 7.08% people as a first language but is understood by a vast majority ("Population Census," 2017). According to Ethnologue, Urdu is spoken as a first and second language by 170 million people that makes it the 11th most widely spoken language in the world (Simons & Fennig, 2018). These countries include, Afghanistan, Australia, Behrain, Bangladesh, Canada, Denmark, Fiji, Finland, Germany, Guyana, Iran, Iraq, Malaysia, Mauritius, Nepal, New Zealand, Norway, Oman, Qatar, Saudi Arabia, Singapore, South Africa, Sweden, Turkey, United Kingdom and United States (Simons & Fennig, 2018).

English belongs to the West Germanic branch of the Indo European family and serves as an international language. It is spoken in many countries both as a native and second or foreign language (Sipra, 2013). It is also spoken habitually in many countries of the world which include the United States, Canada, Australia, New Zealand, Ireland, the British Isles, Liberia, and many territories under the United Kingdom and the United States of America (Simons & Fennig, 2018).

Urdu and English have been in contact with each other for more than four centuries (Rafi, 2013) and have borrowed many words from each other. Although loanwords from English to Urdu is a very common practice at present yet many words have entered into English language and have paved their way to be part of the standard English dialect. One language borrows words from another language in different ways. Sipra (2013) discusses three ways cited by Hasan and Khan (2019) as below:

   i.   Direct borrowing with a minor or no change in the word
  ii.   Translation of already existing word in the local language
 iii.   Mixing of vernacular and the foreign language

The present study analyses loanwords of the Urdu language that fall into the first category. In this case, the recipient language either tries to adopt loanwords with the help of sounds closest to the original sounds that words possess in the source language or sometimes with some

phonological changes in the words (Sipra, 2013). This phenomenon is termed as *adoption* and *adaptation* (Al-Qinal, 2002). The original form and pronunciation of loanwords are maintained according to the donor language in adoption whereas loanwords are changed phonologically in adaptation. Substitution, deletion, addition, assimilation, and epenthesis are some common phonological adaptation processes (Hasan & Khan, 2019).

English and Urdu both have phonological differences in their systems. English possesses forty-four basic phonemes grouped into twenty-four consonants and twenty vowels. Roach (2013) classifies vowels into seven short vowels, five long vowels and eight diphthongs. In addition to the basic phonemes, Roach (2013) adds five triphthongs and two medial sounds /**i**/, /**u**/ to the English phonemic inventory. On the contrary, the Urdu language has a rich inventory of phonemes. Bukhari (1985, 1991) lists twenty-four consonants, seven long vowels and seven short vowels. Khan (1997) describes ten basic vowels including three short /**ɪ, ə, ʊ**/ and seven long /**i, e, æ, a, ɔ, o, u**/ vowels and forty-one consonants. Both of them discuss ten (five short & five long) nasalised vowels too in addition to basic vowels and consonants. Narang (2007) describes thirty-seven consonants and ten basic vowels. All these authors agree upon twenty-eight consonant sounds whereas /**ʔ, ʉʰ, rʰ, nʰ, mʰ, lʰ, ŋ**/ are controversial sounds (Saleem et al., 2002). These studies clearly indicate that phonology of the Urdu language is different from that of English. Firstly, the number of phonemes are different in both languages. Secondly, all Urdu vowels are usually nasalised when they are used with nasal consonants /**m, n, ŋ, ɳ**/ whereas this nasalisation feature is absent in the English language. Thirdly, Urdu does not possess documented diphthongs and triphthongs like English. Lastly, syllabification patterns of both languages also differ. Urdu does not follow the syllabic model of the English language. It allows zero or one consonant at onset position however a maximum of two consonants cluster at the coda position in particular cases (Usman, Ali, & Masood, 2003). Urdu is considered to be a syllable-timed language and it allows vowel sounds to break words into syllables (N. W. Khan, Rizvi, & Farooq, 2020). English speakers are supposed to omit vowel sounds to form complex clusters at the coda or termination position while pronouncing Urdu loanwords.

Loanword adaptations have been a matter of interest for many researchers for a long time. Hasan and Khan (2019) have cited a few recent studies in this regard which include *loanword adaptation in Mandarin Chinese* conducted by Miao (2005), Kenstowicz and Suchato (2006)'s study on *issues in loanword adaptation*, *English loanwords in the spoken Arabic of the southern part of Iraq* carried out by Abdullah and Daffar (2006), *influence of orthography on loanword adaptations* (Vendelin & Peperkamp, 2006), *English loanwords in Burmese* explored by Chang (2009), *phonotactic adaptation of English loanwords in Arabic* (Al-Athwary, 2017) and *morphological adaptation of English loanwords in twitter* conducted by Dashti and Dashti (2017) etc. In the Pakistani context, studies like *Morphophonemics of loanwords in translation* (Al-Qinal, 2002), *vowel substitution: a comparative study of English loans in Punjabi and Urdu* (Hussain, Mahmood, & Mahmood, 2011), *phonological adaptation of English loanwords*

in Pahari (A. Q. Khan & Bukhari, 2011), *phonological adaptations of English words borrowed into Punjabi* (Mahmood, Hussain, & Mahmood, 2011), *phonological make-up of English loanwords incorporated into Punjabi via Urdu* (Hussain, Mahmood, & Mahmood, 2012), *Urdu loanwords in Pakistani English* (Bilal, Warraich, Fatima, Tiwana, & Bhatti, 2012), *linguistic study of borrowings from English to Urdu* (Sipra, 2013), *morphology of loanwords in Urdu* (Mangrio, 2016), *phonological treatment of vowels in English loanwords by Saraiki speakers(Atta, Syed, & Bughio, 2017), phonological analysis of English loanwords in Dhani* (Hasan & Khan, 2019) and *the study of English loanword phonology in Urdu* (N. W. Khan et al., 2020) are some of the recent studies on Pakistani languages. Previously English loanwords into different languages have been explored by many researchers but there are few researches on loanwords into English language. The present research aims to fill this gap. Above mentioned studies are significant because they urged researchers to study phonemic variation of Urdu loanwords that standard British English borrows.

3. METHODOLOGY

3.1 Nature of Research

The present study follows a mixed method approach descriptive research design to identify phonemic variation of Urdu loanwords borrowed into standard British English.

3.2 Population and Sample

All Urdu words borrowed into English were the population of the study. A sample of 135 words of daily use was selected purposively from the *Oxford Advanced Learners' Dictionary, 10th ed.* (2020) for analysis.

3.3 Framework

Levenshtein's (1966) distance algorithm was followed to identify comparisons between Urdu and English speakers' pronunciation of Urdu loanwords. The framework has already been followed by Sanders and Chin (2009), Garcia and Yapici (2014), Chohan and García (2019) and Hasan and Khan (2019). Figure 2 below illustrates the algorithm:

$$\mathrm{lev}_{a,b}(i,j) = \begin{cases} \max(i,j) & \text{if } \min(i,j) = 0, \\ \min \begin{cases} \mathrm{lev}_{a,b}(i-1,j)+1 \\ \mathrm{lev}_{a,b}(i,j-1)+1 \\ \mathrm{lev}_{a,b}(i-1,j-1)+1_{(a_i \neq b_j)} \end{cases} \end{cases}$$

Figure 2. The Levenshtein Algorithm adopted from Hasan and Khan (2019)

This algorithm indicates the difference between two sequences. According to it, distance

between two words is the minimum number of single-character edits (insertions, deletions or substitutions) required to change one word into the other. Distance value in present study indicates the number of phonemic variations that a word undergoes.

3.4 Coding and Transcription

All words were transcribed into IPA and their etymology was confirmed from the dictionary. Pronunciation and etymology of Urdu words were checked from "*Urdu Lughat*," (2017) and *Farhang-e-Talaffuz* (2017) whereas the *Oxford Advanced Learners' Dictionary* (2020) was used to confirm pronunciation and English transcription of Urdu loanwords and a comparison was made to highlight phonemic variation. The data was arranged in a table (4.1) consisting serial number, Urdu transcription, English transcription, distance value and gloss as shown below:

Table 4.1 Urdu loanwords in standard British English

Sr	Urdu Transcription	English Transcription	Distance Value	Gloss	
1	/muːli/	/muːli/	0	Mooli	مولی
2	/nɑː n/	/nɑːn/	0	Nan	نان
3	/pɑːn/	/pɑːn/	0	Paan	پان
4	/ɑːpə/	/ɑːpə/	0	Aapa	آپا
5	/tʃaɪ/	/tʃaɪ/	0	Chai	چائے
6	/aɪə/	/aɪə/	0	Ayah	آيہ
7	/bɑːbɑː/	/bɑːbɑː/	0	Baba	بابا
8	/bɑːbuː/	/bɑːbuː/	0	Babu	بابو
9	/tʃɑːtʃɑː/	/tʃɑːtʃɑː/	0	Chacha	چاچا
10	/puːri/	/puːri/	0	Puri	پوری
11	/nɑː/	/nɑː/	0	Nah	ناں
12	/səlɑːm/	/səlɑːm/	0	Salaam	سلام
13	/ʃɑːbɑːʃ/	/ʃɑːbɑːʃ/	0	Shabash	شاباش
14	/suːfi/	/suːfi/	0	Sufi	صوفی
15	/nəwɑːb/	/nəwɑːb/	0	Nawab	نواب
16	/dʒwɑːn/	/dʒwɑːn/	0	Jawan	جوان
17	/mʊʃaiərə/	/mʊʃaiərə/	0	Mushaira	مشاعره
18	/kɪsɑːn/	/kɪsɑːn/	0	Kisan	کسان
19	/luːt/	/luːt/	0	Loot	لوٹ
20	/ʃɑːmiɑːnə/	/ʃɑːmiɑːnə/	0	Shamiana	شاميانہ
21	/naɪ/	/naɪ/	0	Nai	نائ
22	/ɑːluː/	/æluː/	1	Aloo	آلو
23	/ ḍɑːl/	/dɑːl/	1	Dal	دال

Sr	Urdu Transcription	English Transcription	Distance Value	Gloss	
24	/gərəm məsɑ:lə/	/gʌrəm məsɑ:lə/	1	Garam masala	گرم مصالحہ
25	/hʊqə/	/hʊkə/	1	Hookah	حقہ
26	/ləsi/	/læsi/	1	Lassi	لسی
27	/pəkɔ:ɽə/	/pəkɔ:rə/	1	Pakora	پکوڑہ
28	/pəra:tʰə/	/pəra:tə/	1	Paratha	پراٹھا
29	/raɪʈə/	/raɪtə/	1	Raita	رائتہ
30	/rɔ:ti/	/rəʊti/	1	Roti	روٹی
31	/sɑ:g/	/sæg/	1	Saag	ساگ
32	/səbzi:/	/sʌbzi:/	1	Sabzi	سبزی
33	/səmɔ:sə/	/səməʊsə/	1	Samosa	سموسہ
34	/ʈɪkə/	/tɪkə/	1	Tikka	تکہ
35	/qəmi:z/	/kəmi:z/	1	Kameez	قمیض
36	/pa:dʒɑ:mə/	/pədʒɑ:mə/	1	Pajama	پاجامہ
37	/dʒəleːbi/	/dʒəleɪbi/	1	Jalebi	جلیبی
38	/ʃɑ:l/	/ʃɔ:l/	1	Shawl	شال
39	/tɔ:pi/	/təʊpi/	1	Topi	ٹوپی
40	/əbə/	/ʌbə/	1	Abba	ابا
41	/əmɑ:/	/ʌmɑ:/	1	Amma	اماں
42	/dʒɔ:ʃ/	/dʒɒʃ/	1	Josh	جوش
43	/lʊŋgi/	/lʊŋgi:/	1	Lungi	لنگی
44	/beːgəm/	/beɪgəm/	1	Begum	بیگم
45	/bʰaɪ/	/baɪ/	1	Bhai	بھائ
46	/jɑ:r/	/jɑ:/	1	Yaar	یار
47	/bɑ:ɣ/	/bɑ:g/	1	Bagh	باغ
48	/bɑ:zɑ:r/	/bəzɑ:r/	1	Bazaar	بازار
49	/dʰɑ:bə/	/dɑ:bə/	1	Dhaba	ڈھابہ
50	/dʒɪmxɑ:nə/	/dʒɪmkɑ:nə/	1	Gymkhana	جم خانہ
51	/mɔ:rtʃə/	/mɔ:tʃə/	1	Morcha	مورچہ
52	/naɪlən/	/naɪlɒn/	1	Nylon	نائلٔن
53	/pəŋkʰə/	/pʌŋkə/	1	Punkah	پنکھا
54	/ʈʰɑ:li/	/tɑ:li/	1	Thali	تھالی
55	/meːlə/	/meɪlə/	1	Mela	میلا
56	/xɑ:n/	/kɑ:n/	1	Khan	خان
57	/pæsɑ:/	/paɪsɑ:/	1	Paisa	پیسہ

Sr	Urdu Transcription	English Transcription	Distance Value	Gloss	
58	/rɪkʃə/	/rɪkʃɔː/	1	Rickshaw	رکشہ
59	/xɑːki/	/kɑːki/	1	Khaki	خاکی
60	/bədmɑːʃ/	/bʌdmɑːʃ/	1	Badmash	بدمعاش
61	/pətwɑːri/	/pʌtwɑːri/	1	Patwari	پٹواری
62	/gʰiː/	/giː/	1	Ghee	گھی
63	/qʊlfi/	/kʊlfi/	1	Kulfi	قلفی
64	/dʒəŋgli/	/dʒʌŋgli/	1	Jungli	جنگلی
65	/kəbədi/	/kʌbədi/	1	Kabaddi	کبڈی
66	/kʰɑːdi/	/kɑːdi/	1	Khadi	کھاڈی
67	/nəmək/	/nʌmək/	1	Namak	نمک
68	/kʰɑːnə/	/kɑːnə/	1	Khana	کھانا
69	/krɔːʈ/	/krɔːʳ/	1	Crore	کروڑ
70	/məhəl/	/məhɑːl/	1	Mahal	محل
71	/nɑːlə/	/nʌlə/	1	Nullah	نالہ
72	/ʈəmɑːʃə/	/təmɑːʃə/	1	Tamasha	تماشہ
73	/bətʃə/	/bʌtʃə/	1	Bachcha	بچہ
74	/xʊʃɪ/	/kʊʃɪ/	1	Cushy	خوشی
75	/dʒʊgɑːʈ/	/dʒʊgɑːd/	1	Jugaad	جگاڑ
76	/kɪʈɑːb/	/kitɑːb/	1	Kitab	کتاب
77	/sʊni/	/sʊni/, /sʌni/	1	Sunni	سنی
78	/mʊlə/	/mʊlə/, /mʌlə/	1	Mullah	ملا
79	/beːsən/	/beɪsʌn/	2	Besan	بیسن
80	/bərjɑːni/	/bɪrɪɑːni/	2	Biryani	بریانی
81	/ḍʰənɪə/	/dɑːnɪə/	2	Dhania	دهنیا
82	/qɔːrmə/	/kɔːmə/	2	Korma	قورمہ
83	/ənɑː/	/ʌnə/	2	Anna	انا
84	/ətʃkən/	/ʌʃkən/	2	Achkan	اچکن
85	/bʊrqə/	/bʊəkə/, /bɜːkə/	2	Burqa	برقعہ
86	/ḍʊpətə/	/dʊpʌtə/	2	Dupatta	دوپٹہ
87	/nəqɑːb/	/nɪkɑːb/	2	Niqab	نقاب
88	/ʃeːrwɑːni/	/ʃɜːwɑːni/	2	Sherwani	شیروانی
89	/bənḍʰ/	/bʌnd/	2	Bandh	بندھ
90	/ətʃʰɑː/	/ʌtʃɑː/	2	Achcha	اچھا
91	/əlhɑːdʒə/	/ælhædʒə/	2	Alhaja	الحاجہ
92	/əlhɑːdʒi/	/ælhædʒi/	2	Alhaji	الحاجی

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Sr	Urdu Transcription	English Transcription	Distance Value	Gloss	
93	/mʊfʈi/	/mʌfti/	2	Mufti	مفتی
94	/mu:dʒɑ:həɖi:n/	/mu:dʒəhədi:n/	2	Mujahideen	مجاحدین
95	/tʃəpɽa:si:/	/tʃʌpra:si:/	2	Chaprasi	چپڑاسی
96	/tʃɑ:rpaɪ/	/tʃɑ:pɔɪ/	2	Charpoy	چارپائ
97	/sɑ:hɪb/	/sɑ:b/, /sɑ:ɪb/	2	Sahib	صاحب
98	/mehnɖi/	/mendi/	2	Mehndi	مہندی
99	/la:kʰ/	/læk/	2	Lakh	لاکھ
100	/ ʈəblə/	/tæblə/, /tʌblə/	2	Tabla	طبلہ
101	/mũ:ŋg/	/mu:ŋ/	2	Moong	مونگ
102	/bəhʊ/	/bɑ:huː/	2	Bahu	بہو
103	/mɪrtʃ/	/mɜːtʃ/	2	Mirch	مرچ
104	/wlaɪʈi/	/blaɪti/	2	Blighty	ولائتی
105	/pəŋkʰə/	/pʌŋkə/	2	Punkah	پنکھا
106	/tʰəg/	/θʌg/	2	Thug	ٹھگ
107	/qʊli/	/ku:li/	2	Coolie	قلی
108	/tʃʰɔ:tə/	/tʃəʊtə/	2	Chota	چھوٹا
109	/mæɖɑ:n/	/maɪdɑ:n/	2	Maidan	میدان
110	/ʊsʈɑ:ɖ/	/ʊstɑ:d/	2	Ustad	استاد
111	/bɑ:ɖɑ:m/	/bʌda:m/, /bɑ:dɑ:m/	2	Badam	بادام
112	/pənda:l/	/pændl/, /pændɑ:l/	2	Pandal	پنڈال
113	/ɖe:si/	/deɪsi/	2	Desi	دیسی
114	/gɔ:ʃʈ/	/gəʊʃt/	2	Gosht	گوشت
115	/gʰərɑ:nə/	/gʌrɑ:nə/	2	Gharana	گھرانہ
116	/dʒʰʊgi/	/dʒʌgi/	2	Jhuggi	جھگی
117	/ɖɑ:ɖɑ:/	/dɑ:dɑ:/	2	Dada	دادا
118	/xəri:f/	/kʌri:f/	2	Kharif	خریف
119	/tʃɑ:ɖər/	/tʃɑ:dɔːr/	3	Chador	چادر
120	/ʃi:ʃkəbɑ:b/	/ʃɪʃkɪbæb/	3	Shish kebab	شیش کباب
121	/ ɖʰɔ:ʈi/	/dəʊti/	3	Dhoti	دھوتی
122	/kʊrʈə/	/kɜːtə/	3	Kurta	کرتا
123	/pərɖə/	/pɜːdə/	3	Purdah	پردہ
124	/ʃəlwa:r/	/sʌlwa:r/	3	Salwar	شلوار
125	/məsɪhə/	/məsɑɪə/	3	Messiah	مسیحا
126	/ʈəlwa:r/	/tʌlwa:r/	3	Talwar	تلوار
127	/sərkɑ:r/	/sɜːkɑ:r/	3	Sarkar	سرکار

Sr	Urdu Transcription	English Transcription	Distance Value	Gloss	
128	/sʊlt̪ɑːn/	/sʌltən/	3	Sultan	سلطان
129	/d̪ʰərnə/	/dɜːnə/	3	Dharna	دهرنا
130	/bəŋglə/	/bʌŋgələʊ/	3	Banglow	بنگلہ
131	/muːhələ/	/məʊhʌlɜː/	3	Mohalla	محلہ
132	/xɑːnsɑːmɑ̃ː/	/kɑːnsəmɑː/	3	Khansama	خانساماں
133	/məzd̪uːr/	/mʌzdʊəʳ/	4	Mazdoor	مزدور
134	/kəmərbənd̪ /	/kʌməbʌnd/	4	Cummerbund	کمر بند
135	/ t̪ənd̪ʊrɪ/	/tænd̪ʊəri/, /tænd̪uri/	4	Tandoori	تندوری

4. DATA ANALYSIS

Data presented in table 4.1 above clearly shows that standard British English borrowed loanwords from the Urdu language. These words have been borrowed from different fields like edibles, clothing, relations, places, professions, conversation and miscellaneous. Column 4 in table 4.1 indicates distance values in terms of phonemic variation of Urdu loanwords in standard British English. Zero distance value means no variation in phonemes. Distance values 1, 2, 3 and 4 identify the number of phonemes that undergo change in the process of borrowing. Analysis of the selected corpus shows that Urdu loanwords can be broadly classified into two groups i-e words that do not change their pronunciation and words which change their pronunciation. Figure 3 below, sums up the Levenshtein Distance analysis of Urdu loanwords in standard British English:
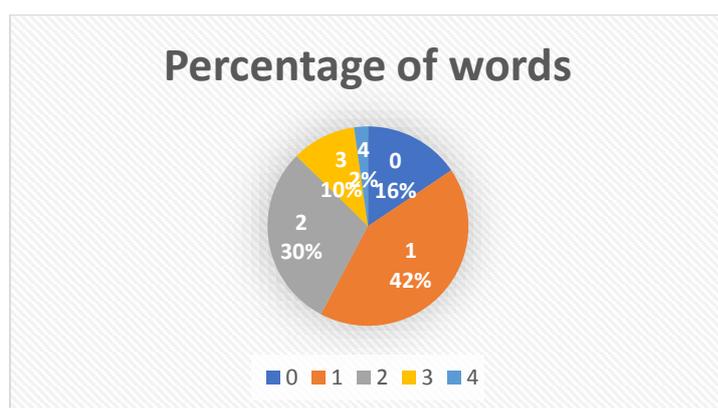
Figure 3. Levenshtein Distance Analysis

Detailed analysis of the data shows discrete changes in phonological patterns of Urdu loanwords and elaborates distance value in detail. Description of data is based on categories i-e substitution, deletion, addition and epenthesis in accordance with distance value. The detailed description is as below:

4.1 No Change

Twenty-one words (16%) at serial 1-21 in table 4.1 indicate zero (0) Levenshtein distance value. This means these words do not undergo any phonemic change during borrowing and they retain their pronunciation.

4.2 One Change

Fifty-seven words i-e 42% shown at serial 22-78 in table 4.1 show one (1) Levenshtein distance value. This indicates that these words undergo one phonemic change. Comparison of Urdu and English words at serial 22-78 in table 4.1 shows that this phonemic change is either a substitution of a vowel or consonant or deletion of a consonant sound. Their detail is as below:

4.2.1 Substitution of Vowel

Data shows that substitution of Urdu vowels is the dominant adaptation strategy in English language. Analysis of data shows that standard British English substitutes some vowel sounds of Urdu loanwords. Examples of vowel substitution from table 4.1 are as below:

i. Urdu short vowel /ə/ is replaced with English central vowel /ʌ/ as in words *garam masala, sabzi, abba, amma, badmash, patwari, jungle, kabaddi, namak, bachcha* (sr. 24, 32, 40, 41, 60, 61, 66, 65, 67, 73) and sometimes it is substituted with /æ/ as sown in word *lassi* (sr.26). It can be found substituted with short vowel /ɒ/ as in word *nylon* (sr.52). Sometimes the same short vowel is replaced with English back long vowel /ɔː/ and back long vowel /ɑː/ as shown in words *rickshaw, mahal* respectively (sr. 58, 70).

ii. Urdu long vowel /ɑː/ is replaced with English central vowel /ə/ as in words *pajama, bazar, nullah* (sr. 36, 48, 71). In some words, the same vowel is substituted with English front short vowel /æ/ as in words *aloo, saag* (sr. 22, 31). Sometimes the same vowel is found substituted with English back long vowel /ɔː/ as in word *shawl* (sr. 38).

iii. Urdu long vowel /ɔː/ is substituted with English closing diphthong /əʊ/ as in words *roti, samosa* and *topi* (sr. 30, 33, 39). The same vowel is also substituted with English back short vowel /ɒ/ as in word *josh* (sr. 42).

iv. Urdu short vowel /i/ is replaced with English front close long vowel /iː/ as in word *lungi* (sr. 43).

v. Urdu long vowel /eː/ is changed with English closing diphthong /eɪ/ as in words *jalebi, begum* and *mela* (sr. 37, 44, 55).

vi. Urdu short vowel /æ/ is replaced with English closing diphthong /ɑɪ/ as in example word *paisa* (sr. 57).

vii. Urdu back short vowel /ʊ/ is substituted with English central vowel /ʌ/ as shown in words *sunni* and *mullah* (sr. 77, 78).

4.2.2 Substitution of Consonant

The English language does not have as rich repository of consonant sounds as Urdu has. English speakers adapt those consonants of Urdu language to the nearest possible consonant sounds of the English language. Cases of substitution of consonant sounds of Urdu loanwords in standard British English from collected data (table 4.1) are as below:

i. Urdu voiced dental stop /ḏ/ is substituted with English voiced alveolar stop /d/ as in word *dal* (sr. 23).

ii. Urdu voiceless, aspirated alveolar stop /tʰ/ is replaced with English voiceless alveolar stop /t/ as in word *pratha* (sr. 28).

iii. Urdu voiced, aspirated alveolar stop /dʰ/ is replaced with English voiced alveolar stop /d/ as in word *dhaba* (sr. 49).

iv. Urdu unaspirated voiceless dental stop /ṯ/ is replaced with English voiceless alveolar stop /t/ as in words *raita, tikka, tamasha* and *kitab* (sr. 29, 34, 72, 76). Similarly, Urdu voiceless aspirated stop /ṯʰ/ is replaced with English voiceless alveolar stop /t/ as in word *thali* (sr. 54).

v. Urdu voiced, aspirated bilabial stop /bʰ/ is substituted with English voiced bilabial stop /b/ as in word *bhai* (sr. 45).

vi. Urdu uvular voiceless stop /q/ is replaced with English voiceless velar stop /k/ as in words *hookah, kameez* and *kulfi* (sr. 25, 35, 63).

vii. Urdu voiceless velar fricative /χ/ is substituted with English voiceless velar stop /k/ as in words *gymkhana, khan, khaki* and *cushy* (sr. 50, 56, 59, 74).

viii. Urdu voiceless, aspirated velar stop /kʰ/ is substituted with English voiceless velar stop /k/ as in words *punkah, khadi* and *khana* (sr. 53, 66, 68).

ix. Urdu voiced velar fricative /ɣ/ is substituted with English voiced velar stop /g/ as in word *bagh* (sr. 47).

x. Urdu voiced, aspirated velar stop /gʰ/ is substituted with English voiced velar stop /]/ as in word *ghee* (sr. 62).

xi. Urdu voiced retroflex flap /ɽ/ is substituted with English palato-alveolar approximant /r/ as in word *pakora* (sr.27). The same consonant can be found replaced with English voiced alveolar /d/ as in word *jugaad* (sr. 75).

4.2.3 Deletion

Deletion or elision is omission of one or more sounds in a word. In the English language, post alveolar approximant /r/ at syllable coda position is omitted when it is followed by a short vowel /ə/. Urdu voiced retroflex trill /r/ used in Urdu loanwords is deleted in standard British English as in words *yaar*, *morcha* (sr. 46, 51). Another case of such sort is deletion of Urdu

voiced retroflex flap /ɽ/ as in word *crore* (sr. 69).

4.3 Two Changes

30% words shown at serial 79-118 in table 4.1 from data show Levenshtein distance value 2 (two). It means, two phonemics changes occur in these words. The most prominent of these changes is double substitution. In this pattern two sounds such two vowels, two consonants or a vowel and a consonant are substituted in a word. Description of such cases with examples from data is as below:

4.3.1 Substitution of two vowels:

In this pattern, two Urdu vowels are replaced such as:
  i.   If an Urdu long vowel /eː/ and /ə/ are used in a word together, /eː/ is replaced with an English closing diphthong /eɪ/ and /ə/ is replaced with an English central short vowel /ʌ/ as in word *besan* (sr. 79).
  ii. If an Urdu central short vowel /ə/ is used in the first syllable and an Urdu long vowel /eː/ is used in the second syllable of a word like *biryani* (sr. 80), /ə/ is replaced with an English front closing vowel /ɪ/ and /eː/ is replaced with an English medial weak vowel /i/.
  iii. When an Urdu central short vowel /ə/ is used with an Urdu long vowel /ɑː/ together, /ə/ is substituted with an English central short vowel /ʌ/ whereas a long vowel /ɑː/ is substituted with an English central weak vowel /ə/ as in word *anna* (sr. 83). Sometimes the same combination of Urdu vowels is replaced with English front open short vowels /æ/ as in words *alhaji* and *alhaji* (sr. 91, 92).
  iv. If two Urdu short vowels /ə/ and /ʊ/ come together in a word, the initial vowel /ə/ is changed with an English open back long vowel /ɑː/ and the second vowel is changed with an English close back long vowel /uː/ as in word *bahu* (sr. 102).

4.3.2 Substitution of two consonants

In this pattern, two Urdu consonants are substituted such as:
  i.   If an Urdu labiodental voiced fricative /w/ and an Urdu voiceless unaspirated dental stop /t̪/ are used in a word together, /w/ is replaced with an English voiced bilabial stop /b/ and /t̪/ is substituted with an English voiceless alveolar stop /t/ as in the word *blighty* (sr. 104).
  ii. When an Urdu voiceless unaspirated dental stop /t̪/ and an Urdu voiced unaspirated dental stop /d̪/ are used in a word, /t̪/ becomes an English voiceless alveolar plosive /t/ and /d̪/ becomes an English voiced alveolar plosive /d/ as in the word *ustad* (sr. 110).

iii. Sometimes an Urdu voiced unaspirated dental stop /d̪/ is used twice in a word such as *dada* (sr. 117); it is substituted with an English voiced alveolar plosive /**d**/.

4.3.3 Substitution of a vowel and a consonant

In this pattern one vowel and one consonant sound are substituted in a word. They can be in one syllable or in two different syllables. Description of this pattern with examples from data is as below:

i. An Urdu central short vowel /ə/ used in words *achkan, dupatta, bandh, achcha, chaprasi, punkah, thug, gharana* and *kharif* (sr. 84, 86, 89, 90, 95, 105, 106, 115, 118) is substituted with an English central short vowel /ʌ/ and a consonant sound in each of these words is also substituted. An Urdu post alveolar unaspirated affricate /tʃ/ in the word *achkan* (sr. 84) is changed with an English palate alveolar voiceless fricative /ʃ/. An Urdu voiced, unaspirated dental stop /d̪/ in the word *dupatta* (sr. 86) is changed with an English voiced alveolar plosive /**d**/. An Urdu voiced, aspirated dental stop /d̪ʰ/ in the word *bandh* (sr. 89) is changed with an English voiced alveolar plosive /**d**/. An Urdu post alveolar aspirated affricate /tʃʰ/ in the word *achcha* (sr. 90) is changed with an English voiceless palate alveolar affricate /tʃ/. An Urdu voiced retroflex flap /ɽ/ in the word *chaprasi* (sr. 95) is substituted with an English palato-alveolar approximant /**r**/. An Urdu voiceless, aspirated velar stop /kʰ/ in the word *punkah* (sr. 105) is substituted with an English voiceless velar stop /**k**/. An Urdu voiceless, aspirated alveolar stop /tʰ/ in the word *thug* (sr. 106) is substituted with an English voiceless dental fricative /θ/. An Urdu voiced, aspirated velar stop /gʰ/ in the word *gharana* (sr. 115) is substituted with an English voiced dental stop /**g**/. An Urdu voiceless, velar fricative /χ/ in the word *kharif* (sr. 118) is substituted with an English voiceless velar stop /**k**/. In an Urdu word *dhania* (sr. 81) an Urdu central short vowel /ə/ is substituted with an English open back long vowel /ɑː/ and an Urdu voiced, aspirated dental stop /d̪ʰ/ is changed with an English voiced alveolar plosive /**d**/. In an Urdu word *niqab* (sr. 87) an Urdu central short vowel /ə/ is substituted with an English front close short vowel /ɪ/ and an Urdu uvular stop /q/ at the onset position of the second syllable is substituted with an English voiceless velar stop /**k**/. In the word *tabla* (sr. 100) an Urdu central short vowel /ə/ is substituted with an English front open short vowel /æ/ and an Urdu unaspirated voiceless dental stop /t̪/ is replaced with an English voiceless alveolar stop /**t**/.

ii. An Urdu long vowel /ɑː/ in the second syllable of the word *mujahideen* (sr. 94) is substituted with an English central weak vowel /ə/ and an Urdu voiced, unaspirated dental stop /d̪/ at the onset position of the fourth syllable is changed with an English voiced alveolar plosive /**d**/. In the word *lakh* (sr. 99) the same vowel is substituted with

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an English front open short vowel /æ/ and an Urdu voiceless, aspirated velar stop /kʰ/ is substituted with an English voiceless velar stop /k/. In the word *badam* (sr. 111) the same vowel is replaced with an English central short vowel /ʌ/ and an Urdu voiced, unaspirated dental stop /ḏ/ is changed with an English voiced alveolar plosive /d/.

iii. An Urdu back close short vowel /ʊ/ in the words *mufti* and *jhuggi* (sr. 93, 116) is substituted with an English central short vowel /ʌ/. An Urdu unaspirated voiceless dental stop /ṯ/ in *mufti* (sr. 93) is replaced with an English voiceless alveolar stop /t/, whereas an Urdu aspirated, voiced post alveolar affricate /dʒʰ/ in *jhuggi* (sr. 116) is replaced with an English palate alveolar voiced affricate /dʒ/. The same vowel in the word *coolie* (sr. 107) is replaced with an English back close long vowel /uː/ whereas an Urdu uvular stop /q/ at the onset position of the first syllable is substituted with an English voiceless velar stop /k/.

iv. An Urdu vowel /ɔː/ in the words *chota* and *gosht* (sr. 108, 114) is substituted with an English closing diphthong /əʊ/ and an Urdu post alveolar aspirated affricate /tʃʰ/ *chota* (sr. 108) is changed with an English voiceless palate alveolar affricate /tʃ/ and an Urdu unaspirated voiceless dental stop /ṯ/ in *gosht* (sr. 114) is replaced with an English voiceless alveolar stop /t/.

v. An Urdu front open short vowel /æ/ in the word *maidan* (sr. 109) is substituted with an English closing diphthong /ɑɪ/ and an Urdu voiced, unaspirated dental stop /ḏ/ is changed with an English voiced alveolar plosive /d/.

vi. An Urdu long vowel /eː/ in the word *desi* (sr. 113) is substituted with an English closing diphthong /eɪ/ and an Urdu voiced, unaspirated dental stop /ḏ/ is changed with an English voiced alveolar plosive /d/.

Besides double substitution of phonemes in a word, sometimes one phoneme is substituted, and one is deleted as described below:

i. In some Urdu words one vowel sound is replaced and one sound is deleted, such as in the word *pandal* (sr. 112), a central short vowel /ə/ in the first syllable is substituted with an English central short vowel /ʌ/ and an Urdu long vowel /ɑː/ in the second syllable is deleted by some English speakers and some pronounce it without any change.

ii. Sometimes a vowel sound is substituted, and a consonant sound is deleted. In the Urdu word *sherwani* (sr. 88), an Urdu long vowel /eː/ in the first syllable is substituted with an English mid-central vowel /ɜː/ and an unaspirated alveolar trill /r/ is omitted at the termination of the first syllable. In the word *charpoy* (sr. 96), an Urdu unaspirated alveolar trill /r/ at the coda position of the first syllable is omitted and an Urdu diphthong /aɪ/ in the second syllable is replaced with an English closing diphthong /ɔɪ/.

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In the word *mirch* (sr. 103), an Urdu short vowel /ɪ/ is substituted with an English mid-central vowel /ɜː/ whereas an unaspirated alveolar trill /r/ in the coda cluster is omitted. In the word *sahib* (sr. 97) an Urdu glottal fricative /h/ at the onset position of the second syllable and an Urdu short vowel /ɪ/ as the centre of the same syllable are omitted and the termination of this syllable becomes the coda of the first syllable. However, some English speakers pronounce it as /**saːib**/. In the word *moong* (sr. 101), an Urdu nasalised back long vowel /ũː/ is replaced with an English back long vowel /**uː**/ and an Urdu voiced unaspirated velar stop /**g**/ in the coda cluster is deleted.

    iii.   Sometimes one consonant sound is substituted, and one consonant is deleted as in the word *korma* (sr. 82); an Urdu uvular stop /**q**/ at the onset position of the first syllable is substituted with an English voiceless velar stop /**k**/ and an unaspirated alveolar trill /**r**/ at the coda position of the same syllable is omitted. In the word *mehndi* (sr. 98), an Urdu glottal fricative /**h**/ is omitted and an Urdu voiced unaspirated dental stop /**d̪**/ is replaced with an English voiced alveolar plosive /**d**/.

4.4 Three Changes

14% words shown at serial 119-132 in table 4.1 show the Levenshtein distance value 3 (three). These words show three phonemic changes. Their detail with examples from data has been discussed as below:

    i.   Substitution of three vowels: Some words undergo substitution of three vowel sounds at the same time. In the word *shish kebab* (sr. 120) an Urdu close front long vowel /iː/ is replaced with an English close front short vowel /ɪ/, an Urdu central vowel /ə/ is substituted with an English close front short vowel /ɪ/ whereas an Urdu back long vowel /ɑː/ is changed with an English open front short vowel /æ/. Similarly, in the Urdu word *mohalla* (sr. 131) an Urdu close front long vowel /iː/ is substituted with an English closing diphthong /əʊ/, an Urdu central vowel /ə/ is changed with an English central vowel /ʌ/ and the same Urdu vowel at the word ending position is replaced with an English mid-central vowel /ɜː/.

    ii.   Substitution of two consonants and a vowel: In this case two Urdu consonants and a vowel are substituted with English consonants and a vowel. For example, the Urdu word *dhoti* (sr. 121) shows this variation. An Urdu voiced aspirated dental stop /d̪/ is replaced with an English voiced alveolar plosive /d/, an Urdu back long vowel /ɔː/ is changed with an English closing diphthong /əʊ/ and an Urdu voiceless unaspirated dental stop /t̪/ is replaced with an English voiceless alveolar stop /t/.

    iii.   Substitution of two vowels and a consonant: In this case two Urdu vowels and a consonant sound are replaced. The Urdu word *sultan* (sr. 128) is an example of such a

variation where an Urdu back short vowel /ʊ/ is replaced with an English central vowel /ʌ/, an Urdu voiceless unaspirated dental stop /t̪/ is replaced with an English voiceless alveolar stop /t/ and an Urdu open back long vowel /ɑː/ is substituted with an English central weak vowel /ə/. Similarly, in the Urdu word *khansama* (sr. 132), an Urdu voiceless velar fricative /χ/ is changed with an English voiceless velar plosive /k/, an Urdu open back long vowel /ɑː/ is substituted with an English central weak vowel /ə/ and an Urdu open, back nasalised long vowel /ɑ̃ː/ at the word ending position is replaced with an English open back long vowel /ɑː/.

iv. Substitution of a consonant, a vowel and deletion of a consonant: In this pattern an Urdu consonant is substituted with an English consonant, an Urdu vowel is substituted with an English vowel and an Urdu consonant often at the word final position is deleted in English. The Urdu words *chador, shalwar, talwar and dharna* (sr. 119, 124, 126, 129) are examples of such variation. In the word *chador* (sr. 119), an Urdu voiced aspirated dental stop /ḓ/ is replaced with an English voiced alveolar plosive /d/, an Urdu back vowel /ɔː/ is changed with an English central vowel /ə/ whereas an Urdu alveolar voiced trill /r/ at the syllable final position is deleted by English speakers. In the Urdu word *shalwar* (sr. 124), an Urdu retroflex voiceless fricative /ʃ/ is substituted with an English labiodental voiceless fricative /f/, an Urdu central vowel /ə/ is changed with an English central vowel /ʌ/ and an Urdu alveolar voiced trill /r/ at the syllable final position is deleted. The same happens with the Urdu word *talwar* (sr. 126) in which an Urdu voiceless unaspirated dental stop /t̪/ is replaced with an English voiceless alveolar stop /t/, an Urdu central vowel /ə/ is changed with an English central vowel /ʌ/ and an Urdu alveolar voiced trill /r/ at the syllable final position is omitted. In the Urdu word *dharna* (sr. 129), an Urdu voiced aspirated dental stop /ḓ/ is replaced with an English voiced alveolar plosive /d/, an Urdu central vowel /ə/ is changed with an English mind-central vowel /ɜː/ and an Urdu alveolar voiced trill /r/ at the syllable final position is deleted. Similarly, the Urdu words *kurta* and *purdah* (sr. 122, 123) also indicate substitution of a vowel, a consonant and the deletion of a consonant sound. In Urdu the word *kurta* (sr. 122), an Urdu back short vowel /ʊ/ is substituted with an English mid-central vowel /ɜː/, an Urdu alveolar voiced trill /r/ at the syllable final position is omitted and an Urdu voiceless unaspirated dental stop /t̪/ is replaced with an English voiceless alveolar stop /t/. In Urdu the word *purdah* (sr. 123), Urdu central vowel.

v. Similarly, the Urdu words *messiah* and *sarkar* (sr. 125, 127) also indicate substitution of a vowel, a consonant and omission of a consonant. In the Urdu word *messiah* (sr. 125), an Urdu front short vowel /ɪ/ is replaced with an English triphthong /ɑɪə/, whereas an Urdu glottal fricative /h/ and an Urdu central short vowel /ə/ are omitted. Similarly, in the word *sarkar* (sr. 127), an Urdu central short vowel /ə/ is substituted with an English mid-central vowel /ɜː/, and an Urdu alveolar voiced trill /r/ at the coda positions

of both syllable is deleted.

4.5 Four Changes

2% words shown at serial 133-135 in table 4.1 from data show Levenshtein distance value 4 (four). These words indicate four phonemic changes in standard British English. Their description is as below:

i. Substitution of two vowels, a consonant and deletion of a consonant: the Urdu word *mazdoor* (Sr. 133) shows this variation. An Urdu central vowel /ə/ is replaced with an English central vowel /ʌ/ and an Urdu voiced dental stop /d̪/ is substituted with an English voiced alveolar stop /d/. Moreover, an Urdu back long vowel /uː/ is substituted with an English diphthong /ʊə/ and an Urdu alveolar voiced trill /r/ is omitted.

ii. Double substitution of a vowel, deletion of a consonant and substitution of a consonant: This variation can be found in the Urdu word *cummerbund* (sr. 134). An Urdu short vowel /ə/ is substituted with an English central vowel /ʌ/. An Urdu voiced alveolar trill /r/ is omitted whereas an Urdu voiced dental stop /d̪/ is substituted with an English voiced alveolar stop /d/.

iii. Substitution of two consonants and two vowels: The Urdu word *tandoori* (sr. 135) shows this variation. An Urdu voiceless dental stop /t̪/ is replaced with an English voiceless alveolar stop /t/. An Urdu short vowel /ə/ is replaced with an English short vowel /æ/. An Urdu voiced dental stop /d̪/ is substituted with an English voiced alveolar stop /d/ whereas an Urdu back short vowel /ʊ/ is substituted with an English diphthong /ʊə/.

5. CONCLUSION

In the light of data analysis, this study concludes that 16% Urdu loanwords into standard British English do not indicate any variation and retain their pronunciation whereas 84% words show phonemic changes in pronunciation. 42% words result in single phonemic change, 30% words have variation in two phonemes, 10% words have variation in three phonemes and 2% words result in variation of four phonemes. This phonemic variation employs different strategies like substitution, deletion and addition. Substitution is one the most prominent strategies. These phonemic changes seem to be systematic and form different patterns. Following these patterns, one can easily identify pronunciation of future Urdu loanwords into standard British English.

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