



Re-syllabification of Borrowed English Words in Urdu: An Analysis of Phonological Patterns and Linguistic Integration

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Abstract

This paper examines the re-syllabification of English words by L1 Urdu speakers. This descriptive examination attempts to investigate the contrast between the templates of the original words and the templates utilized by the L1 speakers. For this reason, three distinct television recordings of public meetings have been taken as an example. The outcomes show that the greater part of the words go through a change when are expressed by the speakers. As each language puts some requirements and limitations on the syllabification of words Urdu does as well. Urdu has unique layouts from that of English. The review uncovers that main CVC template stays stable. Inre-syllabifying process, Urdu follows templatic strategy for syllabification. The V and VC layouts have been tracked down the most unstable formats. The /v/ sound has likewise been replaced by long vowel /ɑ:/ and /ə/ sound with neutral and focal vowel /ʌ/.

1. Introduction

The most common way of separating a word into its constituent syllables is called syllabification (Bartlett, Kondrak & Cherry, 2009) and each language has its own standards of syllabification (Roughages, 2011, p. 251). Urdu has the ability to retain new words and has an attractive vocabulary of English words. Anyway it has its own standards of syllabification. As opposed to English, Urdu is right to left language and forces some limitation on its syllabification. It doesn't permit more than one consonant on beginning position and maximum two on coda whereas English permits as numerous as three on one or the other side. In English non-vocalic sounds additionally act as nucleus while Urdu never allows any non-vocalic sound at this position. At the point when unfamiliar words like that of English are spoken by Urdu Pakistani speakers, once in a while they either erase some sound/s or add epenthesis. For instance, station /steɪʃən/ as a station /əsteɪʃən/. This study aims to investigate the change of templatic syllabification of English loaned words and the phenomenon of deletion and insertion of epenthesis in the re-syllabification process.

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1.1 Statement of the Problem

The point of this examination is to concentrate on deletion or addition of certain sounds in English words when spoken by Pakistani Urdu speakers and attempt to find some component of re-syllabification associated with this cycle.

1.2 Significance of the study

This study won't just assist with figuring out the explanations for the re-syllabification of English words yet additionally give a base to the researchers. This study will be a source for the scholars and researchers to encourage and motivate them to step forward and explore further.

1.3 Objectives of the Research

- i. To know when and why do Urdu speakers sometimes insert or delete sound/s in the re-syllabification of English words.
- ii. To know what kind of loan words (words with what syllable structure) have stability in their templates.

2. Literature Review

In changing horizon, changes are taking place in each part of life. Day to day cooperation of individuals of one area to another has not just influenced their actual appearance yet in addition their mental approach. Similarly, the vocabularies of all dialects go through extensive changes. Urdu is one of the languages with the limit of retaining expressions of other languages. Urdu has its own syllabic construction and places a few limitations in the syllabification of loan words. Before we begin to investigate syllabification of Urdu words, let us have a survey of syllabic structure and its hypotheses. Kenstowicz (1994) characterizes syllable as "an essential concept for understanding phonological structure" (p. 250). It is an essential unit of language but there is controversy in its proper definition. Different linguists have defined it differently (Ranjha, 2012). Ladefoged (2000) says that although everybody can identify it, nobody can define it. A syllable is the smallest possible unit of speech and every utterance definitely contains at least one syllable (Ladefoged, 2000). It has been considered comparatively easy to identify perhaps, that is why no serious attention has been paid on its definition (Ranjha, 2012). To McMahon (2002) "every speaker has an intuitive notion of how many syllables each word has. It is easy for speaker to reflect consciously on the internal structure of a syllable." (p. 105).

2.1 Syllable structure

Though for a native speaker of any language, it is not difficult to recognize the number of syllables a specific expression has yet it isn't easy to give a reasonable definition which can plainly characterize its phonetic and phonological character. To characterize a syllable, it is divided in its components. Each human discourse comprises of vowels and consonants so it is not difficult to talk about it concerning generally (by the greater part of the phonologists) acknowledged syllable format. A syllable is denoted by Latin image σ (sigma). A syllable comprises of Onset and Rhyme and rhyme is further bifurcated into Nucleus and Coda.

An onset is a consonant/s that precedes rhyme. It is an optional part of syllable. Rhyme is further divided into two parts: nucleus (vowel) and coda (consonant/s). Nucleus is an obligatory part of a syllable (Hayes, 2011). Nucleus of syllable may be a vowel or diphthong or a vocalic part (Ladefoged, 2000) functioning as sonority peak. The coda and onset are optional parts of a syllable. Onset, nucleus and coda are also called constituents of a syllable.

2.2 Syllabification

Syllabification is an analytical procedure of grouping or dividing a syllable into its components is called. Bartlett et al. (2009) write that “technically speaking, syllables are phonological entities that can only be composed of strings of phonemes”. Citing Goldsmith (1990) as stated in Akram, (2002) calls syllable structure a process that involves a linear string of segments. Kabir (2002) writes it as an important component of any TTS (Text to speech) system. He also writes that in many languages, the pronunciation of phoneme is a function of their location in the syllable boundaries. He further says that the location in the syllable also has a strong effect on the duration of the phoneme, and is therefore a crucial piece of information for any model of segmental duration. Before we proceed further it seems more suitable to have an over look on syllabification theories or principles.

2.3 Maximal Onset Principle (MOP)

This rule states that maximum consonants are preferred in the onset position (Trask, 1996) allowing only one consonant in the coda position (Goldsmith, 1990, as in Akram 2002). It means that we extend a syllable’s onset (Kahn, 1976 as in Bartlett et al, 2009) leaving no consonant/s except for the final coda consonant in a word. This principle states that if a consonantal segment relates with both following onset and previous coda position of the word then it is preferred in the onset position of the syllable rather than the coda of the preceding syllable. The alternative name given to this principle is ‘coda minimization principle’ because this principle gives preference to maximization of onsets and codas are less preferred (Szigetvari, 2013).

2.4 Maximal Coda Principle (MCP)

MOP prefers maximum consonants in the onset position whereas MCP prefers maximum in the coda, except for the word initial position, no consonant is allowed in the onset position (Akram, 2002). Let’s see an example of the English word disappointment will not be pronounced as /dis.ə.pɔɪnt.mənt/ but as /dis.ə.pɔɪntm.ənt/ according to MCP, the /d/ consonant will be in the onset position of first syllable and all the rest consonants will occupy the place of coda and in the same way.

2.5 Sonority Sequence Principle (SSP)

This is the principle followed by most of the languages of the world. According to this principle, syllabification will be done on the sonority based sounds. The sonority will rise to the nucleus and will fall to the coda position making a bell shape (Bartlett et al., 2009)). According to Crystal

(2003, as in Bartlett, 2009) the sound sonority is based on its pitch, loudness and duration. While uttering a vowel, the vocal tract is more open than consonant. For example /ədva:ntiɔz/ will be syllabified as /əd.vɑ:n.tiɔz/ because /ə/ is more sonorant than /d/ in the coda of first syllable. Again /ɑ:/ is more sonorant than /v/ and /n/. In case of consonant clusters, the proceeding consonant will be more sonorant than following one. For example, /dis.ə.pɔɪnt.mənt/ is consists of four syllables. The third and the fourth syllable have of /nt/ where /n/ is more sonorant than /t/ sound. If we syllabify it as /dis.ə.pɔɪn.tmənt/, it will be wrong as sonority sequence order has been reversed.

2.6 Templatic Syllabification

Templatic syllabification is one more technique for syllabifying a word. It means to isolate a word into syllables based on its templates. As indicated by Hogg and McCully (1987), a syllable template is a theoretical tree structure which gives a base to fit all syllables onto it, in request to be perceived as satisfactory syllables in a specific language. CV is viewed as the most widely recognized and essential sort of syllable (Napoli, 1996). The prior examinations uncover that the syllabic templates of any language are awesome and most straightforward method for comprehension of the phonological properties of that language. “Templatic syllabification may need some revision” (Kenstowics, 1994, p. 276) but it still stands valid for elementary syllable inventory like Arabic, Urdu and Punjabi. Urdu has four CVC, CVV, CVCC, CVVC templates found at every position in a word i.e. word initial, middle and final position; CV at word initial and middle; CVVCC at word final position; and V, VC, VV, VCC, VVC are derived templates.

2.6.1 Templatic syllabification method

This method for syllabification is suitable for Urdu (Ranjha, 2012), is templatic syllabification. Urdu is right-to-left language i.e. its templatic syllabification takes from right-to-left after it is transcribed. Let's take the example of /d'ɪlfəsp/ (interesting) with CVCCVCC templatic structure and can be syllabified as CV.CCVCC or CVC.CVCC. The first best possible template in the right side is CVCC leaving CVC for the first syllable as CCVCC is not possible in Urdu. It may be syllabified CV.CVV.CCCVV or CVC.VVCC.CVV or CV.CVVCC.CVV. According to templatic syllabification, the best possible template on the right side is CVV.

2.7. Research Gap

While there is substantial literature on the concept and identification of syllables, the specific process of syllabification in Urdu, particularly in the context of loan words, remains underexplored. Several scholars have discussed the general notion of syllables and their identification across languages (Kenstowicz, 1994; Ladefoged, 2000; McMahon, 2002). However, there is a lack of comprehensive research focusing on:

1. **Syllabification of Loan Words in Urdu:** Although Urdu is known for its ability to incorporate words from other languages, the mechanisms and patterns of how these loan words are syllabified according to Urdu's phonological rules are not well-documented.

2. **Phonological Constraints in Urdu Syllabification:** The specific syllabic structure of Urdu and the constraints it imposes on the syllabification of both native and borrowed words need detailed investigation.

3. Research Methodology

The current review is descriptive and explorative in approach. To investigate the re-syllabification of English words, three distinct accounts from two TV stations featuring interviews with the public from Karachi, Lahore, and Sialkot were analyzed. The reasoning behind selecting TV programs was to observe the natural usage of words in everyday environments. If the recordings had been conducted after informing the participants or if written words had been provided to them, the results would have been inauthentic as this would have made the speakers self-conscious. The English words spoken by various participants were transcribed by the researcher and analyzed using the software Praat. Praat played a crucial role in this study by allowing for the precise acoustic analysis of speech. It enabled the researcher to measure the duration, pitch, and intensity of syllables, as well as to visualize the phonetic details of the spoken words. This detailed analysis facilitated the identification of differences in syllabification and the templatic forms between the original words and those spoken by Pakistani speakers. A total of 23 English words, ranging from one to three syllables, were used by the Urdu speakers, providing a comprehensive dataset for detailed examination using Praat.

4. Results and Discussion

The study aimed to know what kind of changes take place when The English words are spoken by Pakistani speakers or what kind of sounds are deleted and to check the stability of templates of English syllables.

4.1 Consonants

4.1.1 Monosyllabic words with CVC templates.

The syllables with CVC structure were found stable. In some cases, a vowel was replaced with long vowel (VV) making it CVVC. Foreexample, /fel/ (CVC) became /feil/ (CVVC). The diphthongs were also replaced with long vowel. However, most of the words with CVC templates were found stable.

Rule # 1 CV (diphthong) C → CVVC

4.1.2 Bisyllabic words

As Urdu is right to left language and its syllabification follows the templatic method. As mentioned above, the best possible template comes on the utmost right side. The words with CVC.VC were changed to CV.CVC templates. For example, /siv.əl/ was uttered as /si.vəl/ and /kil.ər/ as /ki.lər/.

Rule # 2 CVC.VC(C) → CV .CV(C)C

If a bisyllabic word has .CVC cluster in the end, a long vowel may be added in the first syllable. For example, /pə.lɪ:s/ is uttered as /pɔ:lɪ:s/.

If a bisyllabic word has CVC.CVC cluster, it remains stable. In some cases, a vowel or diphthong may be replaced with a long vowel.

Rule # 3 CVC.CVC → CV(V)C.CV(V)C

/r/ sound in the coda position is not uttered; however, Urdu speakers utter the /r/ sound. For example, /wɜ:kə(r)/ is uttered as /wʌr.kʌr/ and /tɒ(r).gɪt/ as /tɑ:r.gʌt/.

Rule # 4 CV(r).CV(r) → CVr.CVr

4.1.3 Trisyllabic words

The behavior of Urdu speakers towards trisyllabic is of mixed nature. If a trisyllable ends with .CVC, last template remains stable; however, some changes occur in the preceding templates. For example, /hɒs.pɪ.təl/ becomes /hɑ:s.pɪ.təl/. In case of ending with .CVC.VC(C), the last template becomes .CV.CVC(C). For example, /kɒz.met.ɪk/ becomes /kɑ:s.me.tɪk/. If a trisyllabic word ends with .CCVC, as CC is not allowed on the onset position, so an epenthesis is added between the two consonants i.e .CVCVC. For example, /mɪn.ɪ.stər/ becomes /mɑ:nɪs.tʌr/.

Rule # 5 CCVC(C) → CVCVC(C)

In some cases, trisyllabic word is reduced to bisyllabic word, if there is a syllable with VC preceded by a syllable ending with VCC. For example, /dɪf.ər.əns/ (CVC.VC.VCC) is pronounced as /dɪf.rʌns/ (CVC,CVCC) and /gʌv.ən.ment/ (CVC.VC.CVCC) as /gɔ:r.ment/.

Rule # 6 VC.VCC → CVCC (vowel is omitted)

Rule # 7 VC.CVCC → VC is Omitted

Some trisyllabic words remain trisyllabic but some internal changes take place. If there is single vowel in the middle position and have C in the preceding syllable, it will either become .CV(C) or V will be omitted. For example, /pɒl.ə.sɪ/ (CVC.V.CV) becomes /pɑ:lɪ:sɪ:/ (CV.CVV.CVV) and /mɪn.ɪ.stər/ (CVC.V.CCVC) becomes /mɑ:nɪs.tʌr/ (CV.CVC.CVC). As mentioned earlier, Urdu is right to left language, so it prefers CVC or CVV in the last or next to last syllable.

Rule # 8 CVC.V.CV → CV.CV(V).CVV

In case of .V.CCVC(C), the first consonant of final syllable will become coda of the preceding syllable as Urdu prefers only one consonant in the onset position. For example, /mɪn.ɪ.stər/ (CVC.V.CCVC) becomes /mɑ:nɪs.tʌr/ (CV.CVC.CVC).

Rule # 9 CVC.V.CCVC → CV.CVC.CVC

If there is .VC. in the middle of trisyllabic word proceeded by CVC and followed by a syllable with CC cluster on its coda position, it is omitted completely making the word bisyllabic. For example, /gʌv.ən.ment/ is uttered as /gɔ:.ment/ and /dɪf.ər.əns/ as /dɪf.rʌns/.

Rule # 10 CVC.VC.(C)VCC → CV(V)C.CVCC

4.2 Vowels

4.2.1 Open syllable

As in Urdu, a vowel in an open syllable is always long so open syllables with diphthongs with CV templates were replaced with CVV templates. For example, /noʊ/ (CV) was uttered as /no/ (CVV). As Urdu is moraic language where a mora is a time unit equal to a short vowel and long vowel is equal to two vowels. So diphthong (still controversial whether Urdu has diphthong or not) and long vowels are considered bi-moraic (VV). The speakers changed /oʊ/ with long vowel /o/.

Rule # 11 CV(diphthong) → CVV

4.2.2 Open back vowel

local speakers prefer fully open and back vowel /ɑ:/ to not fully back vowel /ɒ/

Rule # 12 /ɒ/ → /ɑ:/

4.2.3 Neutral vowel

/ʌ/ Urdu, basically, is not a stressed language, so the weakest vowel /ə/ is replaced with central and neutral vowel /ʌ/.

Rule # 13 /ə/ → /ʌ/

4.2.4 Trisyllabic words

Some trisyllabic words remain trisyllabic but some internal changes take place. If there is single vowel in the middle position and have C in the preceding syllable, it will either become .CV(C) or V will be omitted. For example, /pɒl.ə.si/ (CVC.V.CV) becomes /pɑ:.lɪ:.sɪ:/ (CV.CVV.CVV) and /mɪn.l.stər/ (CVC.V.CCV) becomes /mɑ:.nɪs.tʌr/ (CV(C).CVC.CVC).

Rule# 14.V.Omitted

5. Conclusion

The ongoing study uncovers that the expressions of English go through various changes when they are spoken by the Pakistani speakers. Urdu has different templatic framework than English. Different outcomes show that CVC format has been found the most stable template. In the event of diphthongs, a long vowel has been utilized by the Urdu speakers. Urdu is right to left language

and follows templatic method of syllabification so it resyllabifies the English words. Urdu is likewise severe to CC groups on the onset position; in this way, it either adds vowel between the two consonants, assuming it is in the word starting position, or moves beginning consonant to the coda of the previous syllable. The study likewise uncovers that VC template in the center position is least stable and /ə/ sound is likewise not liked by the native speakers. The nearby Urdu speakers favors open fully back vowel /ɑ/ sound to /ɒ:/ sound and central vowel /ʌ/ to /ə/ sound which is least liked. This study rotates around the three television accounts of public meetings, so the results should be affirmed by taking a larger sample.

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Appendix

(English words used by the Urdu L1 speakers during the interviews)

Sr. No.	Word	English transcription	Template	Urdu Transcription	Template
1	No	/nɒv/	CV	/no/	CVV
2	Go	/gɒv/	CV	/go/	CVV
3	Area	/eə.rɪ.ə/	V.CV	/ʔr.rɪ.jə/	CV.CVV.CVV
4	Police	/pə.lɪ:s/	CV.CVC	/pɔ:lɪ:s/	CVV.CVVS
5	Shell	/ʃel/	CVC	/ʃeɪl/	CVVC

6	Road	/rɒd/	CVC	/rɔ:d/	CVVC
7	Media	/mɪ.dɪ.ə/	CV.CV	/mɪ.dɪ.jə/	CVV.VC.CVV
8	Fail	/feɪl/	CVC	/feɪl/	CVVC
9	Killer	/kɪ.lər/	CVC.VC	/kɪ.lər/	CV.CVC
10	People	/pi:pəl/	CV.CVC	/pi:pəl/	CVV.CVC
11	Party	/pɑ:ti/	CV.CV	/pɑ:r.tɪ/	CVVC.CVV
12	minister	/mɪn.ɪ.stər /	CVC.V.CCVC/	/mɑ:.nɪs.tər /	CV.CVC.CVC
13	hospital	/hɒs.pɪ.təl/	CVC.CV.CVC	/hɑ:s.pɪ.təl /	CVVC.CV.CVC
14	cosmetics	/kɒz.me.tɪks/	CVC.CV.CVCC	/kɑ:s.me.tɪks/	CVVC.CV.CVCC
15	government	/gʌv.ən.mənt/	CVC.VC.CVCC	/gɔ:r.mənt/	CVC.CVCC
16	Budget	/bʌdʒ.ɪt/	CVC.CV	/bʌ.dʒʌt/	CV.CVC
17	Meeting	/mi:tɪŋ/	CV.CVC	/mi:tɪŋ/	CVV.CVC

18	Youth	/ju:θ/	CVC	/ju:θ/	CVC
19	Target	/tɒ.gɪt/	CV.CVC	/tɑ:r.gʌt/	CVC.CVC
20	Civil	/sɪv.əl/	CVC.VC	/sɪ.vʌl/	CV.CVC
21	Society	/sə.sai.ti/	CV.CV.CV	/sɔ:.sa:i.ti:/	CVV.CVV.CVV
22	Difference	/dɪf.ər.əns/	CVC.VC.VCC	/dɪf.rʌns/	CVV.CVCC
23	Policy	/pɒl.ə.sɪ/	CVC.V.CV	/pɑ:.lɪ:.sɪ:/	CVV.CVV.CVV