DISTINCTIVE FEATURES ANALYSIS OF FOREIGN LANGUAGE BORROWING WORDS IN JAVANESE LANGUAGE FOUND IN *PANJEBAR SEMANGAT* MAGAZINE 27th EDITION OF JULY 7, 2018

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Abstract

This study is intended to examine the sound change of borrowing word of foreign language in Javanese which is found in Panjebar Semangat magazine. The data is taken from Panjebar Semangat magazine 27th edition on July 7, 2018 and checked using old Javanese dictionary. This study belongs to descriptive qualitative research and used Simak method and Non Participant Observation in collecting the data. The data analysis is done by using Padan method. The result of the study reveals three sound changes of vowels sound and four phonological rules. Then, there are four types of sound change and four phonological rule of consonant sound. The result showed that the sound change of borrowing word in Javanese is influenced by the differences of phonological system between Javanese and the foreign language.

Keywords: *borrowing word, sound change, distinctive feature, phonology*

Abstrak

Bahasa Jawa termasuk dalam bahasa yang memiliki sistem fonologis yang unik. Banyak sekali bahasa asing yang mempengaruhi perkembangan bahasa Jawa. Penelitian ini dimaksudkan untuk menguji perubahan bunyi meminjam kata bahasa asing dalam bahasa Jawa yang ditemukan di majalah Panjebar Semangat. Data diambil dari majalah Panjebar Semangat edisi 27 pada tanggal 7 Juli 2018 dan diperiksa menggunakan kamus bahasa Jawa kuno. Penelitian ini termasuk penelitian kualitatif deskriptif yang menggunakan metode Simak dan Observasi Non Partisipan dalam mengumpulkan data. Analisis data dilakukan dengan menggunakan metode Padan. Hasil penelitian mengungkapkan tiga perubahan bunyi dari bunyi vokal dan empat kaidah-kaidah fonologis. Kemudian, ada empat jenis perubahan bunyi pada konsonan dan empat aturan fonologis bunyi konsonan. Hasil penelitian menunjukkan bahwa perubahan bunyi kata serapan dalam bahasa Jawa dipengaruhi oleh perbedaan system fonologi antara bahasa jawa dan bahasa yang diserap.

Kata kunci : *kata serapan, perubahan bunyi, fitur distingtif, fonologi*

1.   Introduction

Cultural contact that occurred between Javanese and foreign peoples in the past resulted in language contact being affected. Through the entry of other nations into Indonesia, the foreign language indirectly also entered and influenced the development of Javanese language. Besides that, Javanese is

also associated with several branches of linguistics such as Phonology. Phonology discusses the formation of sounds and sounds that are heard and concerned with the function of sound as a means of communication. Generative phonology was first introduced by Avram Noam Chomsky, in generative phonology we learned about the process of changes sound so that we know about phonological rules. Therefore, several analyzes were carried out that could prove this. Thus, the Javanese language can function properly. The use of various foreign languages in the community with these various objectives is clearly indirectly caused by the absence of appropriate and appropriate word equivalents to replace a particular word, both meaningfully and conceptually from the intended word. This is due to the impact of cultural contact with linguistic contacts. This study is headed to describe the sound change of borrowing words from foreign language into Javanese which found in *Panjebar Semangat* magazine through distinctive feature analysis. This study is important to be discussed because in Javanese there are many words that come from foreign languages which are need to examine in terms of phonology. This study was conducted to find out how the process of sound change in borrowing word could happen.

This study used generative phonology and Distinctive feature analysis theory which is developed by Schene (1992). The writer uses transformational generative phonology as a reference because this theory examines more deeply about the phonological aspects compared to the grammatical aspects of linguistic rules. Phonological processes try to find and explain the process of saying a word in relation to language skills. The phonological process is a systematic sound change that affects certain sound patterns and classes. Schene (1992, p.49-59) mentioned there are four types of phonological processes namely, assimilation, syllable structure, weakening and strengthening and the last is neutralization. The explanation of phonological process is described as follow:

1. Assimilation

    Assimilation is a process of sound change where a sound is influenced by the other sound which has the same environment. Assimilation is phonetic sound change due to influences that are before or after. Assimilation is also referred to as the process of sound change which causes it to be similar or similar to other sounds nearby.

2. Syllable structure

    The syllable structure content deletion and insertion process, they are happen when there is a vowel or consonant sound which is deleted or inserted.

3. Weakening and strengthening

    This process is a process when a simple syllable changing into the complex syllable.

4. Neutralization

This process happen if there is a distinction of phonology which is reduced in particular environment.

Through the phonological process, this study will evaluate more related to borrowing words using distinctive feature. In distinctive features, there are three important features that should be known, such as major of class features, manner features, and place or articulation features. Major class features consist of syllabic, sonorant and consonantal. Sounds which belong to [+syllabic] are vowels sound, then for consonants sound, they belong to [-syllabic]. Instead of syllabic, there are also sonorant and consonantal sound. The sonorant refers to resonant quality of sound, vowels sound are included in [+sonorant], then for consonants sound, there are only nasal, liquid and semivowels which are included in [-sonorant]. The next features are manner features. Manner features consist of continuant, delayed released, strident, nasal and lateral. Then for place of articulation features, there are coronal and anterior. Anterior are produced by central of constriction as a source of sound in front of alveolar ridge. Then, the sound belongs to coronal if there is a gust of air passing through it, and the position of the tongue is neutral.

2.   Method

The data used in this study is the list of borrowing words which is found in *Panjebar Semangat* Magazine. There are more than 30 data of borrowing words which found in *Panjebar Semangat* Magazine. Those languages came from Dutch, Sanskrit and Arabic. The focus of this study is consonant sound change of borrowing words, so the data of this study will be served at the form phonetic transcription. In this study, the writer used *Simak* method and *Non Participant Observation*. The writer used some sources to transcript the data from orthography into phonetic transcription. In transcribing the borrowing word from Dutch, the writer used *Javaans-Nederlands Woordenboek.* Then*,* borrowing word from Arabic is checked using *Arabic loanword in Indonesian* by Russesl Jones. The last, data from Sanskrit is checked using book Sanskrit in Indonesian by J.Gonda and Old Javanese Dictionary.

This study is used more than one language as data, so the method used in this study is *Padan* method by Sudaryanto (1993, p.13-16). This method is used to match the elements of the language that have been analyzed, namely the foreign language absorption words in the Javanese language found in the magazine *Panjebar Semangat*. Through the comparison, it can be seen the sound changes that occur in the absorbing process of the foreign language.
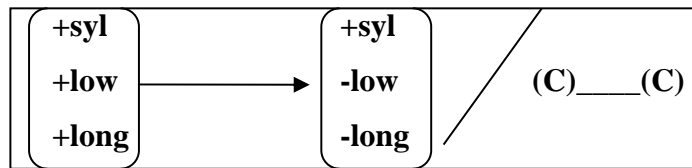
3.   Result

Vowels sound chang

Based on the data which is collected, the writer found there some vowels change of foreign language borrowing words into Javanese language. The sound changes which are found by the writer are long vowel sound change, short vowel sound change and vowel insertion.

1. Long Vowel Sound

Based on the data, the writer found the changing of [+long] vowel sound into [-long] vowel sound. The sample of data can be seen as follow:

a.   [pɽʌkɑːɽʌ] *(Sanskrit)* → [pərkɔrɔ]

b.   [bhɑːɳɖʌ] *(Sanskrit)* → [bɔnɖɔ]

c.   [sʌndɑːl] *(Dutch)*   → [sʌndʌl]

d.   [kɑːɽʧis] *(Dutch)*   → [kʌrcis]

e.   [mʌqɑːm] *(Arabic)* → [mʌkɔm]

The samples of data above, there are two sounds changing from vowel sound [ɑ] into vowel sound [ɔ] and vowel sound [ɑ] changing into vowel sound [ʌ]. By looking at the sound changing above, the phonological rules can be formulated as follow:

$$
\begin{bmatrix} +\text{syl} \\ +\text{low} \\ +\text{long} \end{bmatrix} \longrightarrow \begin{bmatrix} +\text{syl} \\ -\text{low} \\ -\text{long} \end{bmatrix} \bigg/ \ (C)\underline{\hspace{1cm}}(C)
$$

The rules above described that the foreign language from Sanskrit, Dutch and Arabic which have feature [+syl,+low,+long] changing into Javanese vowel sound with features [+syl,-low,-long] when the sounds are placed between two consonants sound. The sound changing happen because in phonological system of Sanskrit, Dutch and Arabic are consist of long vowel sound, this case is contrast with the phonological system of Javanese which does not have long vowel sound. Because of the differences, when the processes of absorption of the foreign language happen, vowel sound with long features changing into short vowel sound in Javanese.

2. Short vowel sounds

Instead of long vowel sound changing, the writer also found sound changing of vowel sound [ʌ] changing into vowel sound [ə] and vowel sound [ʌ] into vowel sound [ɔ]. The sample of data is listed below:

a) [pɽʌkɑːɽʌ] *(Sanskrit)* → [pərkɔrɔ]

b) [bhɑːŋɖʌ] *(Sanskrit)* → [bɔndɔ

c) [ʊʌɽŋʌ] *(Sanskrit)* → [wərnɔ]

d) [cʌɽitʌ] *(Sanskrit)* → [cərita]

e) [qʌmis] *(Arabic)* → [kəmis]

If we observe sound changes in the data above, there is sound changing of sound [ʌ] → [ə] and sound [ʌ] → [ɔ]. Based on the sound changing above, the writer created two phonological rules as follow:

Phonological rule 1:

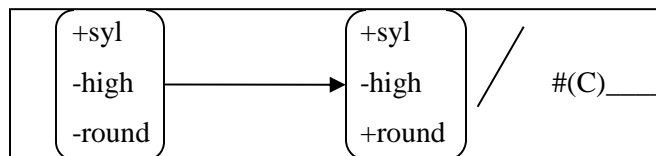*Vowel sound [ʌ] changing into vowel sound [ə]*
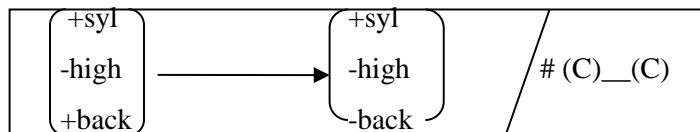
The first rule showed the sound changing of vowel sound [ʌ] into vowel sound [ə]. The rule above described the vowel sound [ʌ] which has features [+syll,-high,+back] changing into vowel sound [ə] with features [+syll,-high,-back]. This changing could happen if the position sound [ʌ] is placed in the middle of consonants sound.

Phonological rule 2:

Vowel sound [ʌ] changing into vowel sound [ɔ]

As the writer mentioned before, vowel sound [ʌ] not only change into vowel sound [ə]. In current position, vowel sound [ʌ] also changing into vowel sound [ɔ]. So, in this case there is a change from unrounded vowel sound into rounded vowel sound. The phonological rule is created as follow:
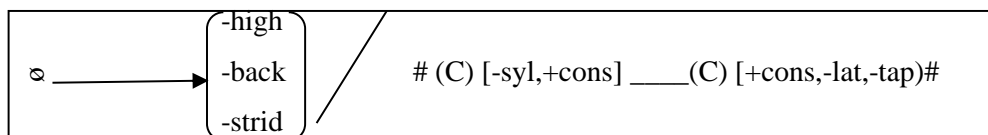

The rule above described vowel sound which has feature [+syl,-high,-round] changing into vowel sound [+syl,-high,+round] after consonants sound. If it is seen from the changes, it can be concluded that the sound [ʌ] can change to [ə] and [ɔ] depending on the environment or its position in a word.

3. *Vowel insertion*

Another phonological process found in this study is Insertion. Insertion belongs to syllable structure process. This process happens because there is another sound which is inserted in to syllable. The insertion process of borrowing word which is found in *Panjebar Semangat* magazine is listed as follow:

    a. [kɽtʌ] *(Sanskrit)* → [kərtɔ]

    b. [wʌls] *(Dutch)* → [bʌləs]

    c. [stro:p] *(Dutch)* →[sətrop]

    d. [stro:m] *(Dutch)* →[sətrum]

The sample of data above showed there is insertion of vowel sound [ə] between two consonant which forming into cluster. For example, on the sample (a) there is insertion of vowel [ə] on the word [kɽtʌ]. The vowel sound [ə] is inserted into consonant cluster [kɽ]. The insertion is changing the word [kɽtʌ] into [kərtɔ]. By looking at the data above, the writer created phonological rule as follow:

$$\varnothing \longrightarrow \begin{bmatrix} -\text{high} \\ -\text{back} \\ -\text{strid} \end{bmatrix} \bigg/ \ \# \ (C) \ [-\text{syl},+\text{cons}] \ \underline{\quad\quad} (C) \ [+\text{cons},-\text{lat},-\text{tap})\#$$

The rule above explains the insertion of vowel sound [ə] on the consonant cluster of words. The insertion of vowel sound [ə] is aimed to facilitate speakers of Javanese in their pronunciation. The rule also showed that the insertion of vowel sound [ə] not only appear on consonant cluster which take position as an onset but also it appears on consonant cluster which has position as coda.

Consonants sound change

Sound change is not only happened to vowel sound but also consonants sound. The writer found some consonants sound changing of Sanskrit, Dutch and Arabic borrowing word in *Panjebar Semangat* magazine. The sound changes are nasal sound change, voiceless uvular plosive sound change, voiced labio-dental approximant sound change, and voiced retroflex flap sound change. The explanation related to consonants sound changes are examined as follow:
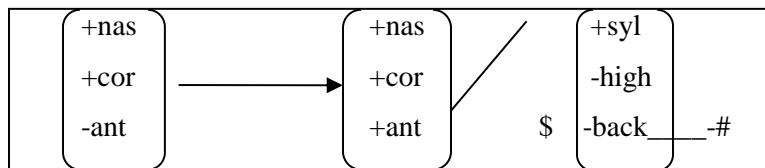
1. Nasal sound change

The first consonant sound which is found in the data is nasal sound change. The list of sample data can be seen below:

    a. [bhɑːɳɖʌ] *(Sanskrit)* → [bɔndɔ]

b.   [dʌɳɖʌ] *(Sanskrit)* ➔ [dəndɔ]

c.   [kɑːɽʌɳʌ] *(Sanskrit)* ➔ [kərɔnɔ]

Based on the sample above, the nasal sound [ɳ] changes into nasal sound [n]. This case happens when the nasal sound is placed after vowel sound [ʌ]. If we observed based on the sound changing above, the phonological rules can be formulated as follow:

+nas		+nas			+syl	
+cor	➔	+cor	/		-high	
-ant		+ant		$	-back___	___-#

The rule above described that nasal sound [ɳ] which has feature [+nas,+cor,-ant] changing into nasal sound [n] with feature [+nas,+cor,+ant] if it is placed after vowel sound with feature [+syl,-high,-back].

2.   *Voiceless uvular plosive sound change*

Another consonants sound which is found in the data is the sound changing of voiceless uvular plosive into voiceless velar plosive consonant. The sound changing can be observed on the data below:

a.   [ʌql] *(Arabic)*   ➔ [ʌkʌl]

b.   [ʌkʰlʌq] *(Arabic)* ➔[ʌklʌk]

c.   [mʌqɑːm] *(Arabic)* ➔ [mʌkɔm]

d.   [qʌbul]   *(Arabic)* ➔ [kʌbul]

The sound changing of consonants sound [q] into consonant sound [k] is mostly come from Arabic borrowing word. The sound changing occur when the consonants sound [q] is placed before vowel sound [ʌ] at the first syllable or it is placed after vowel sound [ʌ] at the first word. If we take a look on the distinctive feature both consonant [q] and [k] almost have the similar feature, the differences are only that consonant sound [k] has [+high] feature then the consonant sound [q] has [+high] feature. Based on the sample of data above, the writer created phonological rule as follow:

+cons		+cons		a. $(C)__[+syl,-high,-back]$#
-son	➔	-son	/	
+high		-high		b. ___[+syl,-high,-back]$#
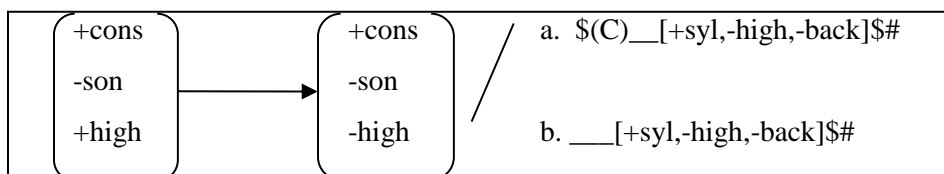
The phonological rule above explain that consonant sound [q] with feature [+cons,-son,+high] changing into consonant sound [k] with feature [+cons,-son,-high] if placed before vowel sound [ʌ] at the
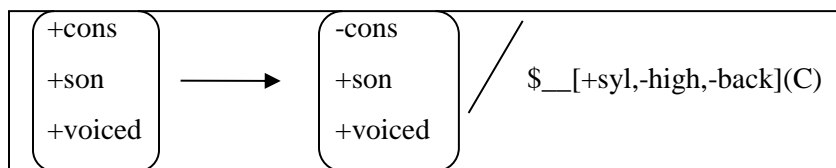
first syllable or it is placed before vowel sound [ʌ] when its position at the first word. The changing is caused the differences of distribution consonants between Arabic and Javanese. In Javanese, the consonants sound [q] is rarely used or almost never used so that it is replaced by consonant sound [k] which has similar feature with the consonant [q] to help the Javanese people pronounce the word easier.

3. *Voiced labio-dental approximant sound change*

Some of data which is collected also found some of sound changing of consonant sound [ʊ] into semivowel [w]. The sample of data has listed as follow:

  a. [**ʊ**ʌɽʌ] *(Sanskrit)* → [**w**ərnɔ]
  b. [**ʊ**ʌjʌs] *(Sanskrit)* → [**w**ʌjʌh]

Based on the sound changing above, it can be concluded that consonant sound [ʊ] changing into semivowel [w] if that sound is followed by vowel sound [ʌ] and placed at the first syllable. The phonological rule is represented as follow:
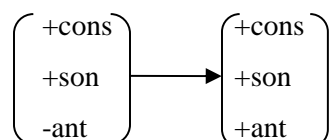
$$\begin{bmatrix} +cons \\ +son \\ +voiced \end{bmatrix} \longrightarrow \begin{bmatrix} -cons \\ +son \\ +voiced \end{bmatrix} / \quad \$\_\_[+syl,-high,-back](C)$$

The rule above explained that consonant sound [ʊ] with feature [+cons,+son,+voiced] changing into semivowel sound [w] with feature [-cons,+son,+voiced] before vowel sound [ʌ] which has feature [+syl,-high,-back] at the first syllable. The sound changing is influenced by the differences of phonological system between Sanskrit and Javanese which is in Javanese do not recognize the consonant sound [ʊ].

4. *Voiced retroflex flap sound change*

The last consonant sound which is found by the writer is consonant sound [ɽ]changing into consonant [r]. The sound changing can be observed by looking the sample of data below:

  a. [pɽʌkɑːɽʌ] *(Sanskrit)* → [pərkɔrɔ]
  b. [kɑːɽʌŋʌ] *(Sanskrit)* → [kərɔnɔ]
  c. [nʌgʌɽʌ] *(Sanskrit)* →[nəgɔrɔ]
  d. [kʌɽkʌɕʌ] *(Sanskrit)* →[rəkɔsɔ]

The sound changing above, there sound change of consonant sound [ɽ] → [r]. So, the phonological rule is formulated as follow:

$$\begin{pmatrix} +cons \\ +son \\ -ant \end{pmatrix} \longrightarrow \begin{pmatrix} +cons \\ +son \\ +ant \end{pmatrix}$$

From the phonological rule above, it described the sound change of consonant [ɽ] which has feature [+cons,+son,-ant] into consonant sound trill [r] with feature [+cons,+son,+ant]. Because of Javanese language do not have consonant sound [ɽ] in their phonological system, so the consonant sound flap [ɽ] in Sanskrit is replaced by consonant trill [r].

4.   Conclusion

The result of the study provides some sound change of both consonant and vowels sound. In vowels sound change, the writer found two types of phonological process namely features changing process and insertion process. There are four phonological rules created to prove the sound changing. Then, in consonant sound the writer only found assimilation with four different sounds changing and created four phonological rules. Based on the result, the dominant factors which influence the sound change are the differences of phonological system between Javanese, Sanskrit, Arabic and Dutch. Most sounds from Sanskrit, Dutch and Arabic that are not found in the vowel and consonant distributions of the Javanese language will be adjusted.

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