

The Study of Phonological Processes in Lori Dialect of Kohgilouyeh: Conversion, Metathesis and Deletion

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Abstract

Kohgilouyeh dialect is one of the dialects of Persian language and has many similarities and some differences with standard Persian. The present study intends to investigate, describe and elucidate the phonological processes in Lori dialect of Kohgilouyeh. Conversion, metathesis and deletion are processes which have been assessed in this article. These processes are only investigated at the phonological level and do not make semantic shifts. The achieved findings indicate that they are mostly the consequence of people's tendency to have more facility and fluency in using language.

Key words: Phonological process, deletion, metathesis, conversion, Lori Dialect of Kohgilouyeh.

Introduction

Lori (Lori) is an Indo-Iranian language cluster with over four million speakers. It is a Southwestern Iranian language spoken mainly by the Lori and Bakhtiari peoples of the Iranian provinces of Lorestan, Chaharmahal and Bakhtiari, Fars province (especially Lamerd), Khuzestan, Esfahan province and Kohgilouyeh and Boyer-Ahmad (Anonby, 2003). Lori dialect is a descendant of a variant of Middle Persian and is lexically similar to modern Persian (ibid). According to the linguist Don Stilo (2001) Persian, Lori-Bakhtiari and others, are derived directly from Old Persian through Middle Persian/Pahlavi.

The special character of the Lori language suggests that its spreading area was Iranicized from Persia and not from Media (Yar-Shater, 1982). Lori also represents a

language continuum between Persian language and Kurdish language varieties, and is itself composed of three distinct languages: Loristani, Bakhtiari and Southern Lori.[4] According to John Limbert, "Lori and Bakhtiari are much more closely related to Persian, than Kurdish" (Houtsma, M. T. & E.J. Brill's, 1987). Traditionally, Lori has been categorized as a single language. Some scholars have stated that Lori is only a highly accented or (lahjeh) form of Persian. On the other hand, some researchers are supporting the division of the Lori continuum into more than one language (Anonby, 2003).

Kohgilouyeh and Boyer-Ahmad Province (*Ostān-e Kohgīrūye-o Būyer-Ahmad*) is one of the 31 provinces of Iran. It is in the south-west of the Islamic Republic of Iran, and its capital is Yasuj. Kohgilouyeh County is a county in Kohgilouyeh and Boyer-Ahmad Province in Iran. The capital of the county is Dehdasht. At the 2006 census, the county's population (including the portions that were split off to form Charam County and Landeh County) was 189,939, in 36,038 families, excluding those portions; the population was 132,550, in 25,052 families (Census of the Islamic Republic of Iran, 1385 (2006)). The county is subdivided into three districts: the Central District, Charusa District, and Dishmok District. The county has four cities: Dehdasht, Suq, Qaleh Raisi, and Dishmok.

Focus of This Study

The aim of present study is to investigate and describe the phonological processes existing in Lori dialect of Kohgilouyeh. Meshkatoddini (1995) stated that phonemes may affect each other during the process of making a syllable, word or combining words, so they may change. These phonetic shifts and effects are called phonological processes and possible processes which may occur are as follows: assimilation, dissimilation, elision, addition, alternation and metathesis. In this study, we investigated and described three processes (conversion, deletion and metathesis) in Lori dialect of Kohgilouyeh.

Main Objective

The main objective of this research concerns with the analysis and description of phonological processes (metathesis, deletion and conversion) in Lori dialect of Kohgilouyeh. Kohgilouyeh Lori dialect is one of the Iranian southern dialects on which no linguistic

research has been done yet. As such, the present study is one of the first systematic investigations on this dialect.

After introducing the geographical situation, culture, customs and historical and linguistic background of the dialect, its phonological system which includes metathesis and conversion has been analyzed. Kohgilouyeh dialect is one of the dialects of Persian language and has many similarities and some differences with standard Persian. This dialect has 24 consonants the same as standard Persian despite the allophonic differences. Moreover, it includes 8 vowels, two of them are diphthongs. The most important phonological processes of Kohgilouyeh dialect are: assimilation, dissimilation, deletion, addition, metathesis, alteration, neutralization, compensatory lengthening and nasalization. Moreover, its syllables are as the following: a) short syllables which consists of one consonant and a vowel sound; b) average syllables which consist of one consonant, a vowel and a vowel and two consonants and c) long syllables which consist of one consonant, a vowel and two consonants.

Methodology

The linguistic corpus has been collected through fieldwork from native speakers of this dialect, living in Dehdasht. Linguistic data has been gathered from the speech recording and interviewing with fifteen illiterate speakers (male and female), with different social backgrounds. Since the research investigates Lori Dialect of Kohgilouyeh, the methodology of the research is that of descriptive that is performed in the modern linguistic theoretical frameworks and the data were gathered in two different ways. In diachronic studies the research used library method and in synchronic studies of the dialect both library and field works were used. In diachronic studies after studying every subject area related reference, the researcher provided note-cards and in synchronic studies the speakers of the mentioned dialect were given some questionnaires or were interviewed.

Background of the Study

There are various viewpoints about the historical background of the dialect and about whether Lori is a dialect or a language, but according to the studies done in the field by Iranian and foreign researchers, it is the remains of one of the ancient Iranian languages of southern branch in west of Iran which was once spoken in the entire Kohgilouyeh and

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Bowyer Ahmad, Fars, Isfahan. In fact, the problem is that the varieties of Lori dialect are so different that in spite of observable resemblances, one variety may not be understood at all in other Lori-governed region. That's why it cannot be easily considered as an individual language. There are some researchers in Iran who have studied Lori,

Ebrahimi (2012) described the Phonological Processes in Mashhadi Dialect by applying a descriptive-analytic approach. She listed the phonological processes as follows: Assimilation, dissimilation, elision, addition, metathesis, and conversion. The results indicated the elision and alteration are the most frequent processes which occur in Mashhadi dialect. On the other hand, dissimilation is the least frequent one.

Razmjoo and Razmjoo (2007) investigated the phonetic system of Lori dialect in Dehdasht based on a descriptive-analytic approach. According to this study, this Lori dialect has 24 consonants the same as Persian despite the allophonic differences. Moreover, it includes 8 vowels. Two of them are diphthongs. The most important phonological processes of Lori dialect of Dehdasht are: assimilation, dissimilation, deletion, addition, metathesis, conversion, neutralization, compensatory lengthening and nasalization. In addition, its syllable are as the following: a) short syllables which consist of one consonant and a vowel sound; b) average syllables which consist of one consonant, a vowel and a consonant and c) long syllables which consist of one consonant, a vowel and two consonants.

Moghimi (1991), in another study, described the Boyer-Ahmadi dialect. In this research, after a short analysis of the historical, geographical and cultural situation of the dialect, phonetic system, grammar and morphology of the dialect were described. The achieved results indicate that Boyer-Ahmadi dialect has 28 consonants, 6 simple vowels and 2 diphthongs. Moreover, the syllable structure rules of this dialect are C(C)V(C)(C).

Zafaranlou and Shabani (2007) studied phonological processes of Gilaki dialect existing in Roudsar province based on a descriptive-analytic approach. The most important phonological processes of this dialect are: assimilation, deletion, and conversion of consonant cluster [-nn] into [-nd], weakening, inversion, compensatory, conversion of consonant /r/ into consonant /L/, and conversion of vowel /a/ into /o/. The results show that assimilation,

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deletion and weakening are the most frequent processes in Gilaki dialect and the consonant of [-nn] into [-nd] cluster into [-nd] are the least. (Zafaranlou & Shabani, 2007: 21)

Zafaranlou (2002) investigated the common phonological processes in Kerman province. He selected four dialects: Kermani, Zarandi, Bardsiri and Sirjani. According to his research, that weakening process is generally used more than strengthening process. Some of the common phonological processes in these four dialects are as follows :

1. Weakening of [b], [v] and [f] in the final syllable.
2. Deletion of glottic consonant [h] and [ʔ] after vowel
3. Deletion of [t] in the consonant cluster [-xt.]

Aghagolzade (2005) studied some active phonetic characteristics and phonological processes of Mazandarani dialect. Active phonetic characteristics refer to phonological processes such as extrinsic germination, assimilation, weakening or lenition. The most obvious finding to emerge from this study was that some phonetic shifts are more active in Mazandarani dialect for instance, the usage of /L/ in Mazandarani dialect in proportion to /r/ in Farsi. Among phonological processes, weakening and assimilation were more active than others (Aghagolzade, 2005: 4).

Attari (2000) grouped Tabasi dialect adaptation into three categories of 1) assimilation of two consonants, 2) assimilation of two vowels and 3) assimilation of a consonant and a vowel. He also appraised some other processes of dissimilation, neutralization and syllable structure rules. Syllable structure rules were themselves classified into subcategories of elision, addition, conversion and metathesis. Through some examples, he explained how these phonological processes happen in Tabasi dialect (Attari, 2000, p. 109).

Mirdehghan, Heidari, KordZafaranluKambozia and Moazen Navade (2014) analyzed the phonological processes of the western Iranian dialect, Delfan Laki. The theoretical framework of this study was based on optimality approach (OT; Prince & Smolensky, 1993). The optimal analysis of the dialect processes has been illustrated together with their

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frequency of occurrence. The results depict lenition and insertion as the highest and lowest frequent processes, respectively.

Okati, Ahangar, Anonby and Jahani (2009) analyzed and described the natural phonological processes in the dialect of Sistani Persian spoken in Iranian Sistan, and reviewed theoretical implications of these processes. In this research, both synchronic and diachronic data were used. The finding of this study showed that assimilation and dissimilation are motivated by segmental context, and processes such as deletion, epenthesis and Metathesis are motivated by syllable structure requirement. Furthermore, The application of metathesis is particularly interesting in Sistani, since it suggests that the application of the Sonority Sequencing Principle (SSP) in the language has been compromised by the internalization and generalization of SSP-violating structures in a dominant neighboring language, Standard Persian.

Data Analysis

Phonological processes indicate a structural shift in phonemic characteristics of a language (Bijan Khan, 2005, p. 185). Phonetic units may happen as a result of co-occurrence, and these shifts are named phonetic processes. Most of phonetic processes are considered as the phonetic universals (Haghshenas, 1977, p. 147). This article has applied a descriptive-analytic approach to elucidate some characteristics of phonological processes in Lori dialect of Kohgilouyeh. Required data have been collected to compare it with standard language through interviewing some uneducated Lori adults or people educated at primary level for two hours. Other resources of getting information were books and poems which were written about Lori dialect of Kohgilouyeh. After collecting needed data, they were classified into different groups to determine the phonetic and phonological processes. It should be mentioned that words' phonetic transcription is on the basis of IPA table. To describe the phonological processes of Lori dialect of Kohgilouyeh dialect, first, they have been defined and then, they have been compared with the existing phonological processes of Persian standard language. In this study, just the two significant processes have been investigated which are as follows: conversion, and metathesis. Although the adverted processes are only brought up at the phonetic level, they do not make any semantic change. They are just to make more facility and fluency in using language

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Metathesis

Metathesis is the process whereby in certain languages, under certain conditions, sounds appear to switch positions with one another. Thus, in a string of sounds where one would expect the linear ordering of two sounds to be *xy*, one finds instead *yx*. For example, *ask* is pronounced *aks* in dialectal English (cf. Crystal, 2003:291). Furthermore, Fasold (2006) believe that ' metathesis means switching the order of sounds. For example, the English word *horse* used to be [hors], before the [ro] sequence was metathesized (p. 46).

Strazny (2005: 679) asserts that metathesis has been investigated typologically along with the following four parameters:

1. Synchronic ~ diachronic: Synchronic metathesis occurs within one chronological period. Diachronic metathesis takes place from one time period to another, e.g. from Middle English to Modern English.
2. Adjacent ~ nonadjacent: Adjacent metathesis occurs when two contiguous sounds are transposed. With nonadjacent or 'long distance' metathesis, the transposed sounds may be separated by one or more intervening sounds.
3. Regular ~ sporadic: Regular metathesis applies consistently, to many different words. Sporadic metathesis is restricted to only a few words and occurs haphazardly.
4. Abrupt ~ gradual: Abrupt metathesis completely transposes sounds in a single step. Gradual metathesis can best be understood as a type of chain reaction, a series of sound changes over time that eventually inverts two sounds. Gradual metathesis therefore uses one or more intermediate stages between the original order and the final transposed order.

In Lori dialect, there is adjacent and nonadjacent metathesis. Some example is presented in the table below:

1. Adjunct metathesis

Table 1: *qf*→*fq* (Adjacent metathesized sounds)

English Vocabulary	Lori dialect of Kohgilouyeh	Standard Persian
roof	/safq/	/saqf/

Table 2: tf→ft (Adjacent metathesized sounds)

English Vocabulary	Lori dialect Kohgilouyeh	Standard Persian
knob	/četf/	/čeft/

Table 3: ly→yl (Adjacent metathesized sounds)

English Vocabulary	Lori dialect Kohgilouyeh	Standard Persian
job	/šoly/	/šoyl/

Table 4: rz →zr (Adjacent metathesized sounds)

English Vocabulary	Lori dialect Kohgilouyeh	Standard Persian
pretext	/ʔorz/	/ʔozr/

Table 5: rb→br (Adjacent metathesized sounds)

English Vocabulary	Lori dialect Kohgilouyeh	Standard Persian
rough	/zerb/	/zebr/

Table 6: qš →šq (Adjacent metathesized sounds)

English Vocabulary	Lori dialect Kohgilouyeh	Standard Persian
map	/našqe/	/naqše/

Table 7: dr→rd (Adjacent metathesized sounds)

English Vocabulary	Lori dialect Kohgilouyeh	Standard Persian
school	/mardese/	/madrese/

Table 8: fr→rf (Adjacent metathesized sounds)

English Vocabulary	Lori dialect Kohgilouyeh	Standard Persian
concion	/tarfaqa/	/tafrage/

Table 9: sk→ks (Adjacent metathesized sounds)

English Vocabulary	Lori dialect Kohgilouyeh	Standard Persian
dorbeetle	/suks/	/susk/

→

Table 10: bz zb (Adjacent metathesized sounds)

English Vocabulary	Lori dialect Kohgilouyeh	Standard Persian
bill	/qazb/	/qabz/

2. Nonadjacent metathesis

Table 11: cě→čc (Non-adjacent metathesized sounds)

English Vocabulary	Lori dialect Kohgilouyeh	Standard Persian
bald	/cačal /	/čacal /

Table 12: tb → bt (Non-adjacent metathesized sounds)

English Vocabulary	Lori dialect Kohgilouyeh	Standard Persian
book	/cebât/	/cetâb/

A close examination of the metathesized sounds of Lori dialect of Kohgilouyeh data, one can easily figure out that there are cases of both adjacent and non-adjacent metathesized sounds with relative differences in the frequency of the two types. That is, adjacent metathesized sounds are relatively more frequent than non-adjacent ones.

Conversion

Conversion occurs when a segmental unit is altered into another segmental unit and there is no justification for this process in the framework of assimilation, dissimilation or any phonological processes (Haghshenas, 2001: 160). In general, the conversion process can be divided into two categories: vowel to vowel and consonant to consonant. Conversion in Lori dialect of Kohgilouyeh has a high frequency. According to Backovic (1994) an occurrence cause of conversion process is SRRONGE ONSET constraint. For example Bakovic (Ibid: 13) claims that this constraint can turn fricative /ð/ to stop /d/ in Spanish language: /ðato/ /dato/

Vowel to Vowel

Examples of vowel to vowel's conversion are listed in the tables (13), (14), (15) and (16).

Table 13: conversion of /â/ → /u/

vocabulary	Lori dialect of Kohgilouyeh	Persian standard language
home	/huna/	/xâne/
spirit	/jun/	/jân/
seed	/duna/	/dâne/
garment	/juma/	/jâme/
flood	/tifun/	/tufân/

tongue	/zavun/	/zabân/
roof	/bum/	/bâm/

In Lori dialect of Kohgilouyeh, /â/ is altered into /u/ before nasal consonant /m/ and /n/. In Lori dialect of Kohgilouyeh, this type of conversion process has a high frequency. There are some examples of conversion in Lori dialect of Kohgilouyeh which can be seen in table (15).

Table 14: conversion of /â/ → /a/

Vocabulary	Lori dialect of Kohgilouyeh	Persian standard language
way	/ra/	/râh/
cap	/kela/	/kolâh/
chaff	/ka/	/kâh/
well	/ča/	/čâh/

Table 15: conversion of /a/ → /ow/

Vocabulary	Lori dialect of Kohgilouyeh	Persian standard language
night	/šow/	/šab/
green	/sowz/	/sabz/
fever	/tow/	/tab/
lip	/low/	/lab/
gaskin	/jorow/	/jorâb/

Table 16: conversion of /o/ → /a/

Vocabulary	Lori dialect of Kohgilouyeh	Persian standard language
good	/xaš/	/xoš/

Consonant to Consonant

Examples of consonant to consonant's conversion are listed in the tables (16) to (20).

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Table16: conversion of /r/ to /l/

Vocabulary	Lori dialect of Kohgilouyeh	Persian standard language
pitch	/qil/	/qir/
hunt	/šekâl/	/šekâr/
fatling	/palvâr/	/parvâr/
leaf	/balj/	/barj/

Table 17: conversion of /v/ to /b/

Vocabulary	Lori dialect of Kohgilouyeh	Persian standard language
troth	/bafâ/	/vafâ/

Table 18: conversion of /ʔ/ to /b/

Vocabulary	Lori dialect of Kohgilouyeh	Persian standard language
eunuch	/baxta/	/ʔaxte/

Table 19: conversion of /x/ to /h/

Vocabulary	Lori dialect of Kohgilouyeh	Persian standard language
virulent	/tahl/	/talx/
red	/sohr/	/sorx/

In the examples of table 19, not only /x/ is converted to /h/, but also metathesis process is occurred.

Table 20: conversion of /t/ to /d/

Vocabulary	Lori dialect of Kohgilouyeh	Persian standard language
mattress	/dešak/	/tošak/

Table 21: conversion of /r/ to /l/

Vocabulary	Lori dialect of Kohgilouyeh	Persian standard language
hole	/sulâγ/	/sorâγ/

Table 22: conversion of /q/ to /x/

Vocabulary	Lori dialect of Kohgilouyeh	Persian standard language
speech	/notx/	/notq/
role	/naxš/	/naqš/

Table 23: conversion of /f/ to /p/

Vocabulary	Lori dialect of Kohgilouyeh	Persian standard language
half	/nesp/	/nesf/

Deletion

Sometimes, a segmental unit such as a consonant, vowel or syllable may be deleted to make the word pronounce easier. This process is widely used in Lori dialect of Kohgilouyeh and occurs in different ways. Look at the examples in tables 6, 7, 8, 9, 10 and 11:

Initial Deletion

Table 24: Examples of initial deletion process

Deletion	Vocabulary	Lori dialect of Kohgilouyeh	Persian standard language
/še/	abdomen	/kom/	/šekam/
/ʔa/	pomegranate	/nâr/	/anâr/
/ʔâ/	fire	/taš/	/ʔâtaš/

As the above table shows, the syllables /šê/, /ʔa/, and /ʔâ/ are omitted from the initial position.

Middle Deletion

Table 25: Example of middle deletion process /ah/

Deletion	Vocabulary	Lori dialect of Kohgilouyeh	Persian standard language
/ah/	four	/čâr/	/čahâr/

Based on table 7, in Lori dialect of Kohgilouyeh dialect, the syllable /ah/ at the middle of word is deleted.

Table 26 Examples of middle deletion process /t/

Deletion	Vocabulary	Lori dialect of Kohgilouyeh	Persian standard language
/t/	lining	/ʔâser/	/ʔâstar/
/t/	bundle	/basa/	/baste/
/t/	kernel	/hasa/	/haste/
/t/	tiered	/xasa/	/xaste/

In Sadate Emamzade Noraldin dialect, the stop consonants /t/ is mostly skipped in the middle of some words. This deletion usually makes compensatory lengthening in the previous vowel or sometimes does not have any effect. The examples in table 8 undergo /t/ deletion.

Table 27: Example of middle deletion process /d/

Deletion	Vocabulary	Lori dialect of Kohgilouyeh	Persian standard language
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/d/	bolter	/ʔârbiz/	/ʔâdrbiz/
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The same thing happens with the oral stop /d/. Based on the table 9, there are some words with a final /d/ in Standard Persian which have lost it Lori dialect of Kohgilouyeh..

Table 28: Example of middle deletion process /r/

Deletion	Vocabulary	Lori dialect of Kohgilouyeh	Persian standard language
/r/	mushroom	/qâč /	/qârč/

Final Deletion

There are some words with final /d/, /b/, /t/, /ɣ/, /v/, and /x/ in standard Persian which have lost them in the Lori dialect of Kohgilouyeh. Examples of final deletion in Lori dialect of Kohgilouyeh are as follows:

Table 11. Examples of final deletion

deletion	Vocabulary	Lori dialect of Kohgilouyeh	Persian standard language
/d/	river	/ru/	/rud/
/d/	white	/safi/	/safid/
/b/	gaskin	/ʃorow/	/ʃorâb/
/t/	hand	/das/	/dast/
/ɣ/	buttermilk	/du/	/duɣ/
/b/	wood	/ču/	/čub/
/v/	cow	/gâ/	/gâv/
/b/	sleep	/xow/	/xâb/
/ɣ/	lie	/deru/	/doroɣ/
/x/	virulent	/tahl/	/talx/
/t/	oak	/bali/	/balut
/d/	groom	/duma/	/dâmâd/

/ɣ/	crow	/calâ/	/calâɣ/
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As the above examples showed, deletion process has a high frequency in Lori dialect of Kohgilouyeh that is accordance with the principle of minimum effort. According to this principle speakers especially use economy in their articulation, which tends to result in phonetic reduction of speech forms.

Conclusion

In this paper, we have provided an overview of phonological processes (conversion, deletion and metathesis) in Lori dialect of Kohgilouyeh spoken in Dehdasht. A close examination of the metathesis process in Lori dialect of Kohgilouyeh data, one can easily figure out that there are cases of both adjacent and non-adjacent metathesis process with relative differences in the frequency of the two types. That is, adjacent metathesis process is relatively more frequent than non-adjacent ones. Furthermore, conversion has much frequency in this dialect. The achieved findings indicate that they are mostly the consequence of people's tendency to have more facility and fluency in using language.

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