
THE ASSIMILATION OF CONSONANTS IN EGHOLID, AN IRANIAN DIALECT

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ABSTRACT: *The aim of this research is to investigate the assimilation of some consonant sounds in Eghlid, one of the Iranian dialects. There are different kinds of assimilation and this article pays to total/ progressive as well as partial/ regressive assimilation of some Eghlidian consonant sounds. The approach of this field-based research is comparative, descriptive and analytical, investigating the assimilation of /n/ to /m/ before /b/, the assimilation of /t/ to /s/ in /st/ consonant cluster, the assimilation of /d/ to /z/ in /zd/ consonant cluster, the assimilation of palatal stops /tʃ/ and /dʒ/ to their velar stop counterparts, and the assimilation of /l/ and /r/ to each other. The achieved results show the specific assimilation pattern of Eghlidian dialect with regard to the standard Persian pronunciation. The phonological analysis and the phonetic transcription of examples will be presented as well.*

KEYWORDS: Assimilation, Consonant, Eghlid, Dialect, Phonological Processes.

INTRODUCTION

In standard generative phonology, assimilation is characterized through the notion of feature copying: segments copy feature specifications from neighboring segments. In non-linear models, a feature or node belonging to one segment (the trigger) is viewed as spreading to a neighboring segment (the target). The assimilation is unmarked when a rule spreads only features not already specified in the target. (a 'feature-filling' mode) If the rule applies to segments already specified for the spreading features (thereby replacing their original values) it is said to apply in a 'feature changing' mode. (Crystal, 2003:39)

Assimilation is one of the most obvious phonological rules. A phonological rule is a formal way of expressing a systematic phonological or morphophonological process or diachronic sound change in language. Phonological rules are commonly used in generative phonology as a notation to capture sound-related operations and computations the human brain performs when producing or comprehending spoken language. As a general term in linguistics, it refers to the influence exercised by one sound segment upon the articulation of another, so that the sounds become more

identical. The study of assimilation has been an important part of historical linguistics study. (Crystal, 2003:38).

John Goldsmith (1995:2) defines phonological rules as mappings between two different levels of sound representation, in this case, the abstract or underlying level and the surface level and Bruce Hayes (2009:26) describes them as "generalizations" about the different ways a sound can be pronounced in different environments. That is to say, phonological rules describe how a speaker goes from the abstract representation stored in their brain, to the actual sound they articulate when they speak. In general, phonological rules start with the underlying representation of a sound (the phoneme that is stored in the speaker's mind) and yield the final surface form, or what the speaker actually pronounces. For example, the English plural *-s* may be pronounced as [s] (in "cats"), [z] (in "cabs"), or [əz] (in "buses"); these forms are all stored mentally as the same *s*, but the surface pronunciations are derived through a phonological rule.(James, 2003)

Hayes lists the following characteristics that all phonological rules have in common: (2009:26-7)

- Language specificity: A phonological rule that is present in one language may not be present in other languages, or even in all dialects of a given language.
- Productivity: Phonological rules apply even to new words. For example, if an English speaker is asked to pronounce the plural of the nonsense word "wug" (i.e. "wugs"), they pronounce the final *s* as [z], not [s], even though they have never used the word before.
- Untaught and unconscious: Speakers apply these rules without being aware of it, and they acquire the rules early in life without any explicit teaching.
- Intuitive: The rules give speakers intuitions about what words are "well-formed" or "acceptable"; if a speaker hears a word that does not conform to the language's phonological rules, the word will sound foreign or ill-formed.

Phonological rules can be roughly divided into four types: (Andreas,2001)

- Assimilation: When a sound changes one of its features to be more similar to an adjacent sound. This is the kind of rule that occurs in the English plural rule described above, the *s* becomes voiced or voiceless depending on whether or not the preceding consonant is voiced.
- Dissimilation: When a sound changes one of its features to become *less* similar to an adjacent sound, usually to make the two sounds more distinguishable. This type of rule is often seen among people speaking a language that is not their native language, where the sound contrasts may be difficult.
- Insertion: When an extra sound is added between two others. This also occurs in the English plural rule: when the plural morpheme *s* is added to "bus," "bus-s" would be unpronounceable, so a short vowel (the schwa, [ə]) is inserted between the two [s]s.
- Deletion: When a sound, such as a stressless syllable or a weak consonant, is not pronounced; for example, most American English speakers do not pronounce the [d] in "handbag".

Concerning this article, the author has investigated and elaborated on the assimilation of some consonant sounds in Eghlidian dialect.

LITERATURE REVIEW:

Authors have worked on different aspects of assimilation, some of which have been mentioned in the following.

Pavlik Radoslav focused on a systematic classification of assimilatory processes found in connected speech. He gives a complex typology of assimilations based on 17 different analytical perspectives yielding almost 60 different assimilation types. In addition to offering a detailed catalogue of assimilation processes occurring in connected speech, the typology might also be used as a tool for analyzing and comparing in a systematic way any connected-speech phenomenon of any language. (2009)

John J. McCarthy, in his book discusses about assimilation, its processes including: A. local B. harmony, the last of which comprises I. vowel harmony II. Consonant harmony III. dominance IV. neutral segments. C. assimilation in phonological theory and gives some examples for each category. (2003)

Jaye Padgett in his work, *Stricture and Nasal Place Assimilation*, explains about the assimilation of nasals to stops and fricatives. He elaborates on these following cases: (1994: 463-513)

-Nasals typically assimilate to stops.

-Before fricatives they most commonly:
don't assimilate, receiving a default place
delete

assimilate, but simultaneously harden the fricative to a stop or an affricate

When fricatives do assimilate to nasals in a language, they assimilate to stops also.

Terry Crowley explains about anticipatory assimilation to a contiguous segment, anticipatory assimilation at a distance, lag assimilation to a contiguous segment, lag assimilation at a distance, as well as Coalescence (fusion), and gives some examples for each type of assimilation. (1997)

Donca Steriade, in his paper, explained about observed regularities in the direction of place assimilation. The best known among these is the fact that assimilation proceeds regressively in intervocalic clusters composed of alveolars, palato-alveolars, labials or velars. This fact is consistent with a variety of interpretations, some of which are discussed. However the range of analyses narrows down drastically once it is observed that assimilation is consistently progressive in clusters composed of retroflexes and alveolars. These two observations are schematically illustrated and instances of each type are presented in the body of the paper. (2000)

Antony Arlotto, in his book explains about assimilation and its different categories and associates them with historical linguistics. He also elaborates on consonant assimilation, one of which is concerned with the assimilation of a consonant when appearing between two vowels and is classified under the title of “lenition”. Vowel assimilation is generally called “vowel harmony”. Another category is related to the assimilation of both consonants and vowels together the process of which is called “compensatory lengthening”. He also gives some examples for each kind of assimilation.(2005:95-101)

METHODOLOGY

The research design of this current study is comparative, descriptive as well as analytical. It compares the phonological pattern of Eghlid, one of the Iranian (Persian) dialects, in view of the standard pattern of Persian language. It describes and analyzes the Eghlidian pattern of making assimilation, which is due to its own phonological system. This kind of research is a field one based on which some native speakers of this dialect have been interviewed and their data have been collected and elaborated.

DIFFERENT TYPES OF ASSIMILATION:

There are several types of assimilation including: total / partial, regressive / progressive, contiguous / non-contiguous as well as coalescent assimilation, all of which have in common that one sound (the target) copies a feature or features of a sound in its environment (the source). Processes of assimilation can be usefully distinguished by the distance between the targeted segment and the source of the assimilating feature(s). In local assimilation, the target and source segment are strictly adjacent. In long-distance assimilation, usually, called harmony, the target and source segments may be quite far apart, though they are usually in the same word. (John J. McCarthy and Smith, Norval, 2003:1).

Sometimes, a consonant in conjunction with another consonant loses some of its phonetic features and instead gets the phonetic features of its adjacent consonant. If this process causes that one of the consonants gets exactly identical to another consonant, it is called total assimilation. For instance, in the combination of the words: and meaning from the beginning respectively, being pronounced as , a total assimilation has been made. But, If the assimilation doesn't lead to complete similarity of two consonant sounds, it is called partial assimilation, like the word , meaning Saturday, being pronounced as (Hghshenas,1999:152)

Assimilation based on the linear direction of change from the dominant phoneme towards the changing phoneme is divided into two general parts: regressive and progressive assimilation. Regressive assimilation is a process during which one consonant coming before another consonant gets identical to it, or in other words, when the second remains fixed and makes the first phoneme similar to itself. Progressive assimilation occurs when the first phoneme remains fixed and makes the second phoneme, in some way, similar to itself. (Arlotto,2005:94)

Another classification is in terms of whether the change of sound involved is the result of the influence of an adjacent sound or of one further away. The common type is known as contiguous or contact assimilation (Crystal, 2003:38). non-contiguous (distant/long-distance) assimilation occurs when there are one or more intervening segments between assimilee(s) and assimilator(s). Synchronically, this can be demonstrated on VCV sequences, where there is mutual influence of the two vowels upon each other, in spite of the presence of the intervening consonant (Öhman 1966; Carney and Moll 1971; Gay 1977).

In coalescent or reciprocal assimilation, there is mutual influence, or fusion of the sounds upon each other, as when *don't you* is pronounced as $\text{ɪ} \text{ ɪ}$. The /t/ and the /y/ have fused to produce an *affricate* /tʃ/. (Crystal, 2003:39).

Concerning this article, the author has examined the total /progressive and partial /regressive assimilation pattern of Eghlidian dialect. The following consonant sounds represent the assimilation of some consonant sounds to other consonants.

THE ASSIMILATION OF /N/ TO /M/ BEFORE /B/:

In Eghldian dialect, like the standard Persian language, the nasal and coronal consonant /n/, before the bilabial consonant /b/, assimilates to it and changes into the nasal-bilabial consonant. In the following, some examples have been presented concerning partial / regressive assimilation:

<u>Standard Persian</u>	<u>Eghlidian Dialect</u>	<u>Meaning in English</u>
		Saturday
		mango
	tamb k	tobacco
panbe	pambe	cotton
manba		source

The above examples show a phonological alternation between m and mb . To determine their underlying form, two hypotheses can be taken into account:

Hypothesis 1: the consonant m is an underlying form and needs a rule to change this bilabial nasal into the coronal consonant n at the proximity of the bilabial consonant b .

Hypothesis 2: the coronal nasal consonant n is an underlying form and needs a rule to change it into the bilabial consonant m at the proximity of the bilabial consonant b .

To determine the underlying form, more data have been investigated which include a nasal consonant /m/ or /n/.

Standard Persian	Eghlidian Dialect	English Meaning
		waves
		mother
		bread
		composition
		revolution
		explosion

In the above data, the bilabial, nasal consonant /m/ is observed in the forms of / / and / / allophones, and the coronal, nasal consonant /n/ in the forms of /n, , , / allophones. According to “the universal standard”, there have been no languages in which those allophones have not been used without either of the nasal consonants /m or /n/ (permon,2001:194).

“distribution criterion” introduces /m/ and /n/ as the underlying phonemes. Because among the existing allophones for /m/, the most various distributions can be mentioned for /m/, this phoneme is observed before the vowels and consonants: / , , , , / and, for instance, the distribution of / / is dedicated to the place of before the labio-dental consonants: /f,v/. Among the existing allophones for /n/, the most various distributions can be also mentioned for /n/, because the distribution of consonant /n/ is far more than other allophones such as: / / or / /. (permon,2001:194).

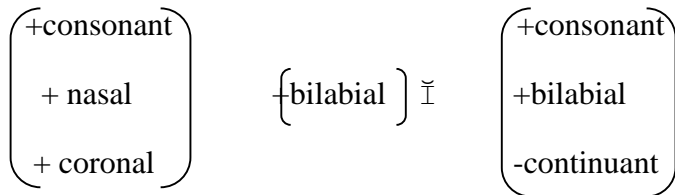
Moreover, the underlying consonant /n/, at the end of the following words, before the words starting with the bilabial consonant /b/, is pronounced in the form of m . That is to say, the underlying coronal consonant /n/ assimilates to the bilabial consonant at the boundary of the word.

Standard Persian	Eghlidian Dialect	English Meaning
		woman
		body
		father’s wife
		lazy

Based on the above examples, the second hypothesis is confirmed. That is, coronal, nasal consonant at the proximity of the bilabial consonant b assimilates to it in feature of the place of articulation and changes into the bilabial, nasal consonant m . This assimilation is of the

regressive kind, i.e. the +bilabial feature spreads from /b/ to /n/ coming before it. The change of nasal consonant /n/ to /m/ is presented in the following rule.

Rule: n → m / [+bilabial]



The above rule shows that the coronal nasal consonant /n/ before the labial consonant /b/ changes into the bilabial consonant /m/. The arrow shows the change of the consonant, the dash under the condition and the hyphen in the context of a consonant.

THE ASSIMILATION OF /T/ TO /S/ IN /ST/ CONSONANT CLUSTER:

In the consonant cluster of /st/, at the boundary of two syllables, the obstruent or stop consonant /t/ changes to /s/. This is a kind of perfect or total assimilation as a result of which the apparent germination is produced. In apparent germination, identical segments are made adjacent through morphological concatenation. (Crystal,2003:197). Below are some of the examples of such total/progressive assimilation:

<u>Standard Persian</u>	<u>Eghlidian Dialect</u>	<u>Meaning in English</u>
peste		pistachio
		kernel
		lining
		package
		sleeve

The analysis of the above data shows a phonological alternation between t and s. To determine the underlying form, two hypotheses can be taken into account:

Hypothesis 1: the consonant s is an underlying form, i.e. in the deep structure, there is a cluster of ss whose second member changes into the obstruent consonant t.

Hypothesis 2: the consonant t is an underlying form, i.e. in the deep structure, there is the consonant cluster of st whose second member changes into the continuant consonant s.

To try these hypotheses, it is necessary to analyze more data. The following table comprises words ending in the consonant cluster of *st*. Column A shows the desired context at the end of the words and column B shows this context before the place of a vowel.

Column A:

<u>Standard Persian</u>	<u>Eghlidian Dialect</u>	<u>Meaning in English</u>
		He/She washed.
		He/She closed.
		He/She sat.
		He/She broke.
		He/She wanted.

Column B:

<u>Standard Persian</u>	<u>Eghlidian Dialect</u>	<u>Meaning in English</u>
		I washed.
		I closed.
		I sat.
		I broke.
		I wanted.

In the above examples, in column A, it is observed that, the stop consonant *t* has been deleted at the end of the consonant cluster of *st*. This consonant is a past making suffix. In Eghlidian Dialect, the past making suffixes, *t* and *d* are deleted when the third person singular verb is used but, appear again in other forms. For instance, the verb *st*, meaning “She/He excused”, is produced as: *st*, (He/ She excused) for the third person singular and *st*, meaning “I excused” for the first person singular. So, it can be said that, in the verbs ending in *st*, or *st*, the past making suffix *t*, is deleted at the end of a word, but appears again before a vowel. Whereas, *t*, when appearing, has the same place of articulation as its adjacent consonant *s*, and is only different from it in the feature of the manner of articulation, changes into *s*. But, it doesn’t change at the proximity of.

The analysis of the above data, which are of the *st* sequence in the underlying structure and a progressive assimilation, of the total or perfect kind, is made between them, confirms the second hypothesis in which the stop consonant /t/ assimilates to /s/, being the continuant consonant of its

co-articulation and changes into /s/ at the boundary of a syllable. Kambuzyia (2006:177), mentions that the assimilation processes, in which there is one feature of the manner of articulation, always change into a total assimilation. The assimilation between the two consonants /s/ and /t/ is also observed in Mazandarani, another Iranian dialect. (Aghagolzadeh, 2004) This phonological process is presented below:

$$t \quad s \quad \text{̤} \quad s \quad \text{̤}$$

$$\left(\begin{array}{l} +\text{consonantal} \\ +\text{coronal} \\ -\text{voice} \\ -\text{continuant} \end{array} \right) \quad \left\{ \text{continuant} \right\} \quad \text{̤} \quad \left(\begin{array}{l} +\text{consonantal} \\ +\text{coronal} \\ -\text{voice} \\ +\text{continuant} \end{array} \right)$$

The above rule shows that the stop consonant /t/, after the continuant consonant of its co-articulation, which is /s/, assimilates to it and changes into $s \quad \text{̤}$. In this rule ̤ is the symbol of the syllable boundary.

The assimilation of t to s inside a morpheme is created without any restrictions. The voiceless coronal stop consonant t assimilates to its preceding voiceless continuant consonant inside a morpheme at the boundary of a syllable. But, at the boundary of the morpheme, this assimilation is faced with restrictions. The analysis of two sets of data represents this fact.

In the data A, the consonant t assimilates to s totally, but, in the data B, such an assimilation is not observed.

Data A:

<u>Standard Persian</u>	<u>Eghlidian Dialect</u>	<u>Meaning in English</u>
		drunk
		loose
		friend
		twenty
		right

Data B:

<u>Standard Farsi</u>	<u>Eghlidian Dialect</u>	<u>Meaning in English</u>
̤		He/ She is drunk.
̤		It is loose.
̤		My friend.

Ĕ

It is twenty.

Ĕ

on your right side

Words on the left hand side of the column A comprise morphemes including syllabic structure of cvcc, ending in the consonant cluster of *st*. The difference between the words in data A is in the vowel before the consonant cluster of *st* in the nucleus of the syllable. In the words of data A, the vowel of the first two words before the consonant cluster of *st* is one of the short vowels: / *i* / or / *e* /. But, in the last three words of the data A, the vowel before the consonant cluster of *st* is one of the long or tense vowels: / *i:* /, / *e:* / and / *u:* /. So, in the first two words of data B in which the vowels before the consonant cluster of *st* are short vowels: / *i* / or / *e* /, total assimilation or apparent germination is produced, whereas, in the last three words of data B, the vowels being tense ones: / *i:* /, / *e:* / and / *u:* /, the assimilation or apparent germination is not produced and the consonant *t* after *st* is deleted at the boundary of the morpheme. To put it another way, in words having a heavy syllabic structure as well as tense vowels, a total assimilation is not observed. But, the vowel before this consonant cluster doesn't make any restriction for the assimilation of *t* to *s* inside a morpheme. For example, in the word / *slu:vs* /, meaning "sleeve", although, the vowel before the consonant cluster of *st* is a long or tense vowel, *t* assimilates to *s*, becoming / *slu:vs* /. But, at the boundary of the morpheme, if the vowel before the consonant cluster is a long vowel, *t* is deleted. So, in producing this apparent germination (being the result of the total assimilation), syllabic structures can be taken into account. Based on the syllabic structures, monomorphemic words, ending in the consonant cluster of *st*, can be divided into two categories: the first category comprises words in which the vowel before this consonant cluster is a short or lax vowel. In these words, the consonant *t* in the cluster of *st* is deleted at the end of the word or before the consonant of another word. But, before a vowel, it assimilates to /*s*/ which is a continuant consonant of its co-articulation. The second category comprises words in which the vowel before the consonant cluster of *st* is a tense vowel. In these words, the stop consonant *t* in the consonant cluster of *st* is deleted, whether this cluster to be at the end of the word, before a consonant or a vowel.

It seems that, in main verbs, there is no restriction for the assimilation of these two consonants. In other words, it can be said that in verbs, there is always a total assimilation between these two consonants at the boundary of a syllable. But, this assimilation, in non-verbal situations, has restrictions in Eghlidian dialect.

THE ASSIMILATION OF /D/ to /Z/ IN /ZD/ CONSONANT CLUSTER:

In Eghlidian dialect, the voiced stop consonant /d/ in the cluster of /zd/ changes into /z/ at the boundary of the syllable. This process is a kind of total/progressive assimilation leading to the apparent germination.

<u>Standard Persian</u>	<u>Eghlidian dialect</u>	<u>meaning in English</u>
		twelve
Ĥ		theft
		thirteen
		eleven
-		from the city of Yazd

The analysis of the above data shows a phonological alternation between d and z . To determine the underlying form, two hypotheses should be taken into consideration:

Hypothesis I: The consonant /z/ is the underlying form, that is, in the deep structure, there is the consonant cluster of zz whose second member changes into the stop consonant /d/.

Hypothesis II: the consonant /d/ is the underlying form. That is, in the deep structure, there is the consonant cluster of zd whose second member changes into the continuant consonant z .

Based on the given examples, in the consonant cluster of zd the voiced stop consonant /d/ makes a total assimilation to its co-articulation continuant consonant /z/ at the boundary of the syllable. The rule of this kind of assimilation is as follows:

$$d \rightarrow z \text{ Ĥ } z \$$$

$$\left(\begin{array}{l} +\text{consonant} \\ +\text{coronal} \\ +\text{voice} \\ -\text{continuant} \end{array} \right) \left\{ \text{continuant} \right\} \text{ Ĥ } \left(\begin{array}{l} +\text{consonantal} \\ +\text{coronal} \\ +\text{voice} \\ +\text{continuant} \end{array} \right) \$$$

The above rule shows that the voiced stop consonant /d/ (having got the features in the bracket on the left hand side of the page) assimilates to /z/ (having got the features in the bracket on the right hand side of the page) which is its co-articulation continuant consonant and changes into the +continuant . In this rule, \$ is the symbol of the boundary of the syllable.

THE ASSIMILATION OF PALATAL STOPS AND TO THEIR VELAR STOP COUNTERPARTS:

The two hard palate stop consonants and change into their velar stop counterparts and before back vowels. In data A, hard palatal allophones, and in data B, velar allophones have been represented:

Data A:

<u>Standard Persian</u>	<u>Eghlidian dialect</u>	<u>Meaning in English</u>
		dog
		death
		book
		deaf

Data B:

<u>Standard Persian</u>	<u>Eghlidian dialect</u>	<u>Meaning in English</u>
ol	gol	flower
		meat
		knife
		nightmare

The comparison between A and B data shows that the hard palatal stop consonants / / and / / always appear before the front vowels and their velar stop counterparts / / and / / appear before the back vowels. So, two phonological alternations exist between / / / / and / / / /. To determine the underlying form, two hypotheses can be considered:

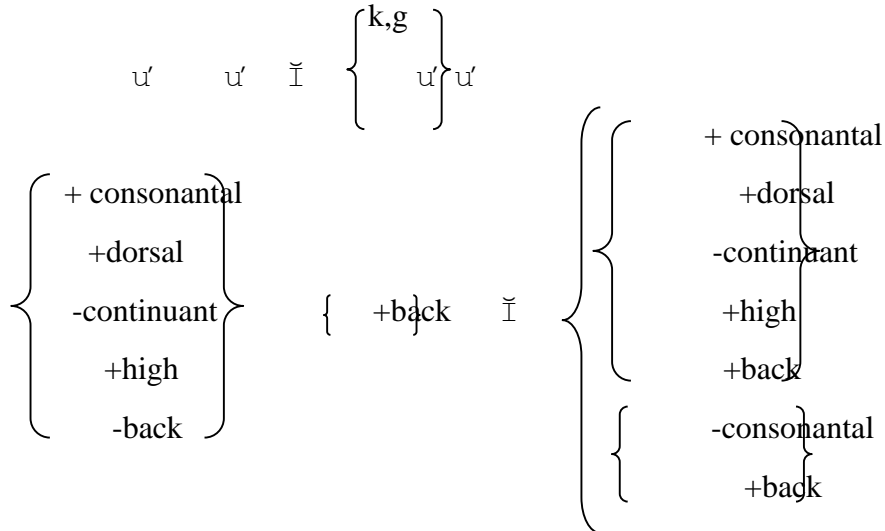
Hypothesis I: Consonants and are the underlying forms and a rule is needed to change these soft palatal consonants to their hard palatal counterparts and before the front vowels.

Hypothesis II: Consonants and are the underlying forms and a rule is needed to change these hard palatal consonants to their soft palatal counterparts and before the back vowels.

According to Samareh:(1985)“These consonants are palatal and each one has two places of articulation. One of them is in front of the palate and almost at the center of the hard palate, and the other one is at the back of the palate and almost at the center of the soft palate. The front pair is presented with the symbols , and their back pair with the symbols . In producing the front pair, a stop is made in the hard palate and in producing the back pair a stop is made in velar.”

Based on the “distribution standard”, it can be said that, back velar consonants don’t appear at the end of words and their distribution at the boundary of a syllable depends on a back consonant after them. For instance, the word , meaning “dog”, having got the plosive consonant at its end, is pronounced separately as in the sentence meaning: “the dog went”. But in the combination of meaning a wolf-like dog, the pronunciation will be . back velar consonants , never appear at the

end of a word. So, the underlying form of the consonants / / and / / can be considered as hard palate which change into the velar stop counterparts before a vowel or before back consonants: g/ and /k/. The assimilation rule of this consonant is presented as follows:



The above rule shows that palatal stop consonants / / and / / change into the velar stop consonants / / and / / before the back vowels or before velar stop consonants / / and / /.

THE ASSIMILATION OF L/ AND /R/ TO EACH OTHER:

Another case of consonant assimilation in Eghlid is the assimilation of the consonants /l/ and /r/ to each other. Their data have been presented in the following chart.

<u>Standard Persian</u>	<u>Eghlidian Dialect</u>	<u>Meaning in English</u>
		chain
		wall
		opening
		leaf

The analysis of the above data shows a phonological alternation between l and r. To determine the underlying form, two hypotheses can be considered:

Hypothesis I: Consonant l is an underlying form and needs a rule to change it into r.

Hypothesis II: Consonant r is an underlying form and needs a rule to change it into l.

l and r are both liquid consonants and make a natural class of sounds. They are different from each other in just the feature of lateral, but they have common phonological processes. In many of the Persian dialects including Sabzevari and Rashti ones, these two consonants substitute each other in most of the words.(Norouzi,2003:86) In Middle Age, many words having had one of these two consonants, were rewritten with either one. So, whereas, these two consonants belong to the same natural class of sounds and once were one consonant, they substitute each other in many contexts.

In the given data, it is observed that, tense vowels before liquid consonants l and r are produced in the form of the very short allophones. In the above examples, and show tense vowels having been produced in the form of very short allophones. So, one of the contexts in which very short allophones are produced from tense vowels in Eghlidian dialect is the context before the liquid consonants l and r . The assimilation process between these two liquid sounds are seen in the following examples:

Standard Persian	Eghlidian dialect	Meaning in English
loder	rodel	loader
buldezer	bordezel	bulldozer

These two words show that the underlying consonant /l/ changes into /r/ and the underlying consonant /r/ changes into /l/.

DATA ANALYSIS:

Based on the phonological rules comprising different processes, segments condition other segments:

- a) consonants condition consonants: e.g., nasal place and manner assimilation, voicing assimilation and occlusion assimilation.
- b) vowels condition vowels: e.g., fronting, backing, raising or rounding.
- c) consonants condition vowels: e.g., vowel nasalization and vowel fronting.
- d) vowels condition consonants: e.g., labialization, palatalization, spirantization, voicing, fronting, backing.

These represent phonological processes in many languages, whether allophonic or morphophonological. They can apply progressively (to segments which follow a given segment) or regressively (to segments which precede a given segment), and to contacted (adjacent) or non-contacted (non-adjacent) segments. The assimilation rules, as one of the phonological processes, are general in different languages, but their patterns, the kinds of segments as well as the changes of sounds differ in different languages.

What is new about this field-based research is that this dialect has not been studied linguistically so far and this article is, in fact, the first linguistic study of the dialect. All studies performed about it have been limited to just collecting words and idioms existing in this dialect and have been done by interested nonlinguistic people.

Moreover, this research has been done to show two aspects of the assimilation of Eghlid, an Iranian dialect, including: total/progressive and partial/regressive, so that those being interested in dialectology extend their knowledge and research in this field,

CONCLUSION

Based on what was explained about assimilation and its phonological rules, it is proved that written forms of languages are systems of their own which cannot be described by simply referring to phonological properties. It is a fact that often lexicon and syntax and particularly the structure of texts in written language are completely different from those in spoken language. Phonological rules analyze such differences in different languages. The assimilation of each language or dialect differs from another one and there are some causes for the language change including the sound change. Phonological changes very often make combinations of sounds easier to pronounce. In other words, one of the key motivations for speakers to change a sound or assimilates one sound to another one is ease of articulation. In this article the assimilation pattern of an Iranian dialect, the Eghlidian one, was presented to elaborate on the phonological system of its consonant assimilation with regard to its variety to the standard Persian language. General rules of assimilation are universal but the assimilation of consonant or other sounds differs in different languages.

REFERENCE

- Arlotto, Antony (2005) *An Introduction to Historical Linguistics*. Tehran: Humanities Science and Cultural Studies Center.
- Aghagolzadeh, Ferdos (2003) *Dialectology: Some of the Phonetic Changes and Phonological Processes in Mazandarani Dialect*. Tehran: the Academy of Persian Language and Literature.
- Crystal, David (2003) *A Dictionary of Linguistics & Phonetics*. Blackwell Publication, pp.38-9..
- Crowley, Terry (1997) *An Introduction to Historical Linguistics*. 3rd edition. Oxford University Press.
- Goldsmith, John A. (1995) *Phonological Theory: The Handbook of Phonological Theory*. Blackwell Handbooks in Linguistics. Blackwell Publishers.
- Gay, Thomas (1977) Articulatory movements in VCV sequences. In *Journal of the Acoustical Society of America*. vol. 62, no. 1, pp. 183-193.
- Hayes, Bruce (2009) *Introductory Phonology*. Blackwell Textbooks in Linguistics. Wiley-Blackwell.
- Hghshenas, Ali Mohammad (2003) *Phonology*. Agah Publication.

- Idsardi, William James (2003) *Phonology: A Rule of English*. University of Delaware. Retrieved 2009.
- Idsardi, William James (2003) *Phonology: The pronunciation of the English plural*. University of Delaware. Retrieved 2009.
- Kambuziya Aliyeh (2006) *Phonology: Rule-Based Approaches and their Applications in Persian*. Tehran: Samt Publication.
- McCarthy, John J. and Smith, Norval (2003) *Assimilation Phonological processes*. University of Massachusetts, Amherst.
- Macnezi, David Nickel (2000) *The Encyclopedia of Pahlavi Language*. Tehran: Research Center.
- Noruzi, Tahereh (2003) *The Analysis of the Phonological Processes of Gilaki Dialect*. MA Thesis. Tarbiat Modares University, p.86.
- Öhman, Sven E. G. (1966) Co-articulation in VCV Utterances: Spectrographic Measurements. In *Journal of the Acoustical Society of America*. vol. 39, no.1, pp. 151-168.
- Permon, Yadollah (2001) *Persian Colloquial Phonetic System of Modern Standard: generative, prosodic and lexical approach*. Doctoral Thesis of Tarbiat Modares University.
- Patrick J. Carney, Kenneth L. Moll (1971) *In Phonetica*. A Cinefluorographic Investigation of Fricative Consonant-Vowel Co-articulation. pp.193-202.
- Radoslav, Pavlík (2009) A Typology of Assimilation. In *Skase Journal of Theoretical Linguistics*, vol. 6, no. 1.
- Padgett, Jaye (1994) *Stricture and Nasal Place Assimilation*. *Natural Language and Linguistic Theory* 12, Leipzig University. PP, 463-513.
- Samareh, Yadollah (1985) *Persian Language Phonology: Phones and the Phonetic Structure of Syllables*. Tehran: Unversity Publication Center.
- Schramm, Andreas (2001) *Phonological Rules*. Hamline University. Retrieved 7 March 2009.
- Steriade Donca (2000) *Directional asymmetries in place assimilation: a perceptual account*. University of California, Los Angles.