



## The Role of Phonological Strength in the Diachronic Occurrence of Fortition Processes in Persian Based on the Approaches of Foley and Vennemann

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### 1. INTRODUCTION

Phonologists have spoken about lenition and fortition for more than a century; in fact, for as long as phonology has existed. The first scientific terminology that was introduced in the 19th century in order to talk about manner distinctions is based on the intuition that sounds naturally range on a scale which expresses strength.

This paper studies the role of phonological strength in the occurrence of fortition processes in Persian language. The fortition processes of glide oclusivization, glide fricativization, glide affrication and buccalization according to the concepts of «positional strength», «assimilative strength» and «the inertial development principle» (Foley, 1977), and «the preference laws for syllable structure» (Vennemann, 1988) are analyzed.

The questions posed in the present study are: 1- In the occurrence of each of the processes of glide oclusivization, glide fricativization, glide affrication, and devoicing and buccalization, which of the factors mentioned in the Foley approach (1977) have a role? 2- To what extent have the mentioned processes been done in order to improve the structure of the syllable according to the "the preference laws for syllable structure" (Vennemann, 1988)? 3- What is the explanation for the role of "phonological strength" in the emergence of Persian language strengthening processes?

### 2. MATERIALS AND METHODS

Middle and Old Persian data have been collected from these sources: "A concise Pahlavi Dictionary" (Mackenzie, translated by Mirfakhraee, 2012), "A Manual of Pahlavi" (Nyberg, 2011), "Old Persian: Grammar, Texts and Lexicon" (Kent, 1953), and the University of Texas Center for Linguistic Research Web site at:

[https://lrc.la.utexas.edu/eieol\\_base\\_form\\_dictionary/aveol/22](https://lrc.la.utexas.edu/eieol_base_form_dictionary/aveol/22)

The data are in the form of words and their transcription is presented in old and Middle Persian using the old transliteration method which is used by linguists in the indication of historical data and their equivalents in modern Persian are indicated by the international transliteration alphabet IPA.

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### 3. RESULTS AND DISCUSSION

To address the first research question, the processes discussed in the question were examined, and it was found that all 4 processes have a role.

Addressing the second research question, after examining the studied processes, it was found that the consonants /θ/, /w/, /y/ and /h/ in the position of the onset of the syllable and the morpheme in order to correct the undesirable onset of Middle Persian were affected by the preferred onset law and has changed to [s], [b, ʃ, v], [dʒ] and [χ], respectively, and the preferred onset has been obtained in modern Persian.

In response to the third question, after examining the processes of glide occlusivization, glide fricativization, glide affrication and buccalization, it was found that the position of consonant in syllable and morpheme in Persian language has an important role in changing them. The consonant /θ/ is reinforced in the strong position of the beginning of the word and syllable and becomes /s/, and in the weak position of the terminal it undergoes the process of "debuccalization" and becomes [h], / xšāyaθiya / → [ʃah] "King". Middle Persian glide /w/ has become as stop consonants [b, ʃ] at the beginning of the word.

Under the influence of "fricativization" at the beginning of the syllable and the word in modern Persian, this glide has become a consonant [v]. The middle Persian glide /y/ has become an affricate consonant [dʒ] at the beginning of the word during the process of "glide affrication". The conversion of the glottal /h/ in Middle Persian to the oral consonant [χ] occurred at the beginning of the word in modern Persian under the influence of the "buccalization" process.

### 4. CONCLUSION

In all 4 processes, the factor of "positional strength" plays a role. The consonants /θ/ and /ç/, /w/, /y/ and /h/ in the position of the onset of the syllable and the beginning of the word in order to correct the undesirable and weak onset in Middle Persian under the influence of the "the law of heads", have been converted to [b, ʃ, v], [dʒ] and [χ] respectively and a preferred onset has been obtained in Modern Persian. 3- The position of consonants in syllables and morphemes in Persian language plays an important role in changing them.

**Keywords:** Phonological strength, Positional strength, Inertial development principle, Preference laws for syllable structure