Extended Abstract

Relationship between the Syllable Structure of Suffix and the Moraic Weight of the Base in Persian Tri-syllabic Words

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Introduction

Weight pattern of a word is the weight of its syllables and it is defined based on the distinction between heavy and light syllables (Carr, 2008:172). As Hayes (1989: 356) mentions a mora (often symbolized μ) is a basic timing unit that link between prosodic and segmental information, represented by the root node. Mora is equal to or shorter than a syllable and the weight of the syllable does not depend on the number of segments in the syllable but the number of moras in it. Heavy and super heavy syllables are of more moras compared to light syllable with one mora; for example, a short syllable such as ba consists of one mora (mono-moraic), while a long syllable such as baa consists of two (bi-moraic). Such metrics are also referred to as syllable weight. In Moraic Theory, only rhyme constituents contribute to the weight of the syllable and are tied to moras (μ), while onsets are tied directly to the syllable node (σ); playing no role in weight (Hyman, 1985: 145-6). According to Kambuziya (2006:135) "in moraic theory, short vowels bear one mora and long vowels bear two moras, not considered phonologically light at all." In a large corpus of 32 thousand tri-syllabic words, there are 6665 derivatives, formed by adding a derivative suffix to a lexical or grammatical base or root (Shaghaghi, 2007: 85). Studies show the derivative suffixes, while added to a base, are cofined to some constraints regarding moraic weight; as in a derivative like /Ξatar-nAc/, the syllable before the suffix /-nAc/ consists of two moras; while

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the derivative suffix /-i/ in /emruz / is added to a tri-moraic base. So, different behavior of these suffixes raises the question," What is the difference between the weight patterns of the base when suffixes beginning with a consonant in the onset or suffixes with no onset, are added to". This study examines the tri-syllabic derivatives in a moraic-theoretic framework and discover if there is any relationship between the syllable structure of the suffix and the moraic weight pattern of the base. Thus, after a brief summary of the definitions about the theory and syllable weight, the distribution of weight pattern with regard to the two groups of suffixes will be explained and compared.

Materials & Methods

This paper examines the relationship between the syllable structure of derivational suffixes and the weight of the base it is added to, in Persian tri-syllabic words, within a Moraic-theoretic account. The weight pattern of a word is the weight of its syllables and it is defined based on the distinction between heavy and light syllables (Carr, 2008:172). The research data includes a set of 6665 tri-syllabic derivatives in Persian that contain derivational suffixes, collected from dictionaries Dehkhoda (2003) and Moshiri (2009), sorted in an Excel worksheet with all their etymological and phonological information, including the weight of syllables (light, heavy, super-heavy, and ultra-heavy) and the number of moras.

Results & Discussion

Study of tri-syllabic derivatives with derivational suffixes shows there are two groups of suffixes in Persian: suffixes beginning with a consonant in the onset and the structure -CV(C). (C)(V)(C); suffixes with no onset, beginning with a vowel, and the structure -V(C). (C)(V)(C). In Persian, any syllable in the surface realization contains an obligatory onset, an obligatory vowel as nucleus, and an optional coda consisting of one or two consonants, that is a structure of CV(C)(C) (Windfuhr1997:138-139; Samareh 1999:108-110; Kambuziya). So those suffixes with no onset are re-syllabified. If the previous syllable ends in a consonant, re-syllabification without epenthesis happens; if it ends in a vowel, in order to avoid vowel hiatus, a consonant epenthesis is inevitable.

 Analyzing the data and studying the distribution of the base weight patterns with regard to the two groups of suffixes showed that suffixes with no onset, beginning with a vowel, are the most frequent and productive. They make about 77% of the data, and can be added to all kinds of bases, first and mostly, tri-moraic, then, two moras (bi-moraic), next, four moras (tetra-moraic), and finally, one mora (mono-moraic). While suffixes beginning with a consonant in the onset are about 23 percent and less productive. They tend toward bi-moraic bases. First and mostly, they tend toward two moras (bi-moraic), then tri-moraic, next one mora (mono-moraic), and finally, four moras (tetra-moraic) bases.

Conclusion

Studies show that there are two groups of suffixes in tri-syllabic derivatives: suffixes beginning with a consonant in the onset; suffixes with no onset, beginning with a vowel. The latter, make about 77 percent of the data, among which /-i/ as a long vowel is so frequent and productive and can be added to all bases of one mora (mono-moraic), two moras (bi-moraic), three moras (tri-moraic), and even four moras (tetra-moraic). The weight patterns of these suffixes show that they mostly tend toward tri-moraic bases. On the other hand, suffixes with a consonant in the onset are less productive and tend toward bi-moraic bases.

Keywords: Derivational Suffix, Syllable Weight, Mora, Derivatives, Tri-syllabic Words

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