Grammatical aspect in Persian: A distributed morphology approach

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1. INTRODUCTION

The distinction and interaction of functional projections of tense and aspect in the sentence structure has been one of the main subject matters in linguistic researches performed with different viewpoints. There are, also, a number of great works about aspect in Persian with lexicalist perspectives. However, the current research aims to investigate the structural position of the grammatical aspect, both the perfect and progressive aspect, and its structural relation to the tense, on the basis of the non-lexicalist morphosyntactic framework of Distributed Morphology.

Distributed Morphology (DM) was proposed in the early 1990's by Halle and Marantz. It is an exciting framework within the Government and Binding tradition and the Minimalist Program that is very appealing because it is both a model of syntax and a model of the morphological component of the grammar. According to Siddiqi (2009, p.5), in Distributed Morphology, there is only one generative component of the grammar (the syntax) whereas in Lexicalist Minimalism, there are two (the syntax and the lexicon). By hypothesizing that the machinery that is responsible for the morphology is the same machinery responsible for the sentence structure, DM drastically reduces the computational load of the model. In DM, unlike in GB and its Lexicalist derivatives, rather than manipulating fully formed words, the syntax only manipulates abstract features to generate syntactic structures. These formal features are selected from a fixed list of abstract features rather than being selected from the output of a generative lexicon.

2. MATERTIALS AND METHODS

The morphological operations applied in post-syntactic component of the grammar are our methodological devices in order to investigate the explanatory efficiency of DM in Persian sentence structures. In the post-syntactic component, there are a number of operations to account for morphological behavior. The majority of these operations occur at spellout or between spellout and PF. In fact, after applying syntactic operations in the syntactic component, there are some morphological processes, such as morphological merger, fusion, and fission operating on the syntactic output. Morphological merger, as a way of realizing syntactic structures with morphological structure, is a kind of affixation. Therefore, it is a type of head

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movement at PF and can be downward. The process of fusion exists in DM to account for situations where merger is not quite adequate for the distribution of vocabulary items in a string. So, fusion takes two terminal nodes and reduces them into one node. Complementary to fusion, the process of fission splits one terminal node into many, like the process employed in splitting AGR into separate heads. After these morphological operations, vocabulary items compete with each other to insert into terminal nodes. Since the phonology which represents the morphological features manipulated by the syntax, is provided at PF rather than being present throughout the derivation, Distributed Morphology is considered a late insertion model. In fact, only once all syntactic processes are finished with the structure is phonological content added. In this competition, those vocabulary items that best fit to their defining environment win and insert. Throughout the insertion, there may be some kind of allomorphy. In DM, allomorphy can be accounted for by applying morphological merger and fusion. These processes are the ones exploited in the present research in order to illustrate Persian verbal and sentence structures and investigate the structural position of the aspect projection.

3. RESULTS AND DISCUSSION

Distributed Morphology (Harley, 1995; Marantz, 1997) depicts that the verbal domain includes a "little v" that can just categorize a root and change a root into a verb. Therefore, this theory appeals to the "split-vP analysis" hypothesis according to which a verb phrase is divided into three projections: a RootP (headed by a category-neutral root), a vP (headed by a verbal categorizer) and a VoiceP (headed by a Voice which can introduce the external argument). In this morphosyntactic approach, v is no longer capable of introducing the external argument; instead, this task is given to a new functional head called Voice. So, this grammatical model is different from the Lexicalist model; because here a verb phrase itself is broken into a vP and a VP (Harley, 2013).

Assuming the split-vP analysis in Persian verb phrases and division of a verb phrase into a VoiceP, a vP and a RootP, we showed that the lexical or light verb moves out of VoiceP in order to merge morphologically with higher functional heads, like the aspect and the tense. Therefore, making a complex head in each morphological merger, the verb can attract different affixes. Besides, it was shown that in Persian sentence structure, the aspect projection is structurally higher than VoiceP and below TP. Hence, the main or light verb moves out of VoiceP, so that it can be attached to the aspect affix ("mi-" in progressive and "budan" in perfect aspect) through the morphological merger. In addition, we could illustrate allomorphy in verbal roots by using morphological merger depicted by DM.

Having explained the structural relation of the aspect and tense projections, the present research showed a major distinction between the structural position of the perfect and progressive aspect in the sentence structure. Using morphological operations like morphological merger and fusion as the morphological processes of DM, it was shown that the progressive aspect rather than the perfect aspect has a closer relation to the verbal projection. This part of the results was in accordance with Ramchand (2017) who believed that the projection of progressive aspect was in the verbal domain whereas the projection of perfect aspect in the higher domain, that is, the clausal domain. In the present research, it was shown that if we change the hierarchical order of progressive and perfect aspect, we will get the incorrect structure.

4. CONCLUSION

This study offers some insights into the application of the morphosyntactic framework of Distributed Morphology in which the grammar includes just one generative engine, the syntax. As the present research showed, the split-vP hypothesis along with syntactic operations and postsyntactic morphological processes in DM are well efficient in analyzing the interaction of two functional projections of aspect and tense. These morphological processes can well explain affixations and root allomorphies related to these functional projections.

Since DM proposes the same mechanisms for analyzing sentences and words, explaining compounds (because of their morphosyntactic nature) in Persian, especially those in which there are functional projections of tense and aspect, and teaching these Persian compounds to foreigners on the basis of DM can be another avenue of research.