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A Semantic and Corpus-based Study of negative prefixes «na» and «bi» in Persian: Lieber's lexical-semantic approach

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Abstract

The present sturdy studies the semantic function negative prefixes «na» and «bi» in Persian. The founder of this approach using six semantic features, studies semantic function of morphological items, including affixes and their function in the processes of compounding, derivation and conversion. In the present research, data which is collected from the second version of" Hamshahri" corpus and polysemy of prefixes «na» and «bi »has been studied according to the type and meaning of stem. analyzing data suggests that different meanings of prefix « na» are due to co- indexing principle. This principle, can't explain the negative meaning in some cases and for the elaboration of negative meaning in these cases we need to put away the principle and pay attention to semantic features of stem; although this issue is not correct about prefix «bi» and we can explain all negative meanings conveyed by this affix. Also, it was shown that negative prefixes «bi» and «na» are adjective maker; except, in some small amount of cases.

***Keyword*s:** Lieber's approach, Negative prefix, Co- indexing principle, Semantic features

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1. Introduction

Persian uses derivation process (for instance affixation) for making new words. This process has e close relation with semantics; it means that affixation adds a meaning to the meaning of derived word or it can even make a new word. It is possible that in derived words polysemy could be found. Polysemy is one the important issues in semantics and lexical relations and it happens when a word or morpheme has more than one meaning which are related to each other. Lieber (2004) introduced lexical- semantic approach to study morphological meaning and focused on the semantic effects of compounding, derivation and conversion instead of the meaning of words. Lieber (2004) had a different perspective towards affixes and tried to focus on semantic features of affixes to understand their semantic roles. It was shown that affixes have semantic content and semantic skeleton; while they have less semantic body.

The present paper is a corpus-based study of prefixes "na and bi" according to Lieber (2004) approach. These prefixes are compared according to the negative meaning they make. A corpus- based study can show tokens which don't have high frequency but they exist in the language; also it can provide examples of target words in real language and context. Furthermore it is possible for researcher to find tokens which are not mentioned in dictionary and are used in language because of users' creativity; this is one the most significant feature of corpus-based studies which shows its priority upon dictionary studies.

Lieber (2004) introduces co-indexing principle which is used for joining complements together. In complex word semantic skeletons are next to each other which are made following syntactic structures. For making a complex word it is necessary to have some elements in a united referential element. This referential element determines the number of complements in syntax. These referential units are called complement. So indexing is a tool which is used for complements of different units of a complex word (Lieber, 2004,

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p.45). Lieber believes that affixes, like other linguistic units, have complement which should be co-indexed by one of the stem's complement and affixes can be shown by semantic feature of [-loc].

1.1 research questions

The present paper aims to show different negative meanings represented by two prefixes :na and bi" according to Lieber approach. Writers try to answer these questions: a) can prefixes change part of speech of their stems or no? b) can we explain polysemy of these prefixes using co- indexing principle or thare are other factors which determine their meaning?

2. Literature review

Ahmadi Givi and Anvari (2008, p. 185) believe that "na" is a prefix which attaches to the beginning of the simple word and makes a negative adjective. Karimidoostan and Moradi (2012) have studied semantic role of suffixes "ande and ar" in Persian according to Lieber approach. They show that role of these suffixes are not subject or object roles; these suffixes can add some semantic features to the stem and the reason for their polysemy is because of different application of co-indexing principle not their semantic role. Ahangar and Moradi (2016) have studied semantic role of suffix "-h" in Lieber approach and findings show that this suffix had three semantic skeleton. Andreou (2015) has studied semantic features of prefixes "dis and in' in Lieber's approach.

3. Methodology

examples of target prefixes are extracted randomly from the tokens which were extracted from Hamshahri corpus. data were extracted from second volume of Hamshahri corpus. this corpus has more than 150 million words

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which helps researchers to find rare linguistic examples; also it is written ina general contemporary language. All the words containing prefixes "na and bi" were extracted from the corpus. AntConc (Anthony ،2014) was used to extract target data. This software has seven tools among theme concordance tool was used for doing the present study. concordance tool can help researchers to see the target words in context. For finding the words containing target prefixes, in search part of Antconc na* and bi* were typed (separately). Expression "target morpheme*" in this tool means that you are looking for the words which start with target prefixes. In this way it is possible to have some words which are irrelevant to your study; so because of this issue after searching the words by antconc, researcher has to filter data extracted by Antconc in Excel. After filtering process there were 535 words containing "na" and 1139 words containing "bi" were studied.

4. Result

According to data it was shown that prefixes " na and bi" are adjective makers and can change stem's part of speech to an adjective; this is the answer of the first question of this paper. Also findings suggest that it is not possible to explain different meanings of target prefixes using co-indexing principle; because prefix "na" doesn't have any complement to get co-indexed by stem's complement; this prefix can have different semantic skeleton when it joins different stems. About prefix "bi" it was shown that different meanings of this prefix could be explained using co-indexing principle and it has a different semantic skeleton from "na" 's skeleton.

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