Selectional Restrictions on the Derivational Persian Suffix «انه-»/-ɑne/

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Abstract

This paper tends to study selectional restrictions on the Persian suffix «انه-». Selectional restrictions which have been dealt with include grammatical, morphological, phonological and semantic constraints and pragmatic restrictions including useful neologism, necessity of labeling and aesthetic constraints. Words derived from the suffix «انه-» have been extracted from Zansoo dictionary. For deleting old words from the data they have been double checked in Sadri Afshar's contemporary dictionary. Hence the data used by current Persian speakers were well in hand to seek for selectional restrictions. On our way to attain grammatical and semantic constraints, categories and subcategories of bases and derived words are presented via investigating the actual data in hand. In order to get access to other constraints, 50 grammatically and semantically appropriate bases which do not attach to the selected affixes and do not form acceptable words have been extracted from the dictionary of Sadri Afshar and have been investigated along with the actual derived words which were gathered earlier from Zansoo and Sadri Afshar's dictionaries. Thus by comparing the actual words which are

in use and the possible but non existing word forms, other selectional restrictions including phonological, morphological, useful neologism, necessity of labeling and aesthetic constraints have been presented for each suffix.

Keywords: Word formation, Affixation, Derivational affixes, Selectional restrictions, Productivity

1. Introduction

Morphological competence applies some selectional restrictions on the process of deriving words. This means that all possible combinations of suffixes and bases don't enter language and a large number of them are blocked by selectional restrictions. For instance if we had 10 suffixes and wanted to derive words including just 2 suffixes and if there were no restrictions, there ought to be 10*9 potential suffix pairs. But in fact just a small number of these combinations are in use. Indeed suffixes may consider some selectional restrictions namely grammatical, morphological, phonological and semantic constraints as well as pragmatic restrictions including useful neologism, necessity of labeling and aesthetic constraints in the process of deriving new words.

This research is an attempt to investigate selectional restrictions on the derivational suffix «انه-» in Persian. For this purpose actual words derived from this suffix are extracted from the dictionaries of Zansoo and Sadri Afshar. Based on the data analysis, grammatical and semantic restrictions of this suffix will be defined, and meanwhile categories and sub-categories of bases and derived words will be obtained. Then this question arises that how «انه-» chooses among grammatically and semantically appropriate bases. First of all, appealing to grammatically and semantically appropriate bases possible derivational, phonological, and functional constraints for this suffix are taken into account. For the next step 50 grammatically and semantically appropriate bases which do not attach to «انه-» are extracted from the dictionary. And then by putting these bases next to «انه-» and forming possible but non-existing word forms and by placing these forms into the probable selectional restrictions and by analyzing the data, selectional restriction of the suffix «انه-» will be well in hand.

With regard to our study on selectional restrictions three main approaches can be named: trata approach, selectional restriction approach and complexity-based ordering approach. The present research has been carried out through the sights of selectional restriction approach. Linguists such as Fabb (1988), Plag (1996, 2005), Bauer (1983), Aronoff & Fuhrhop (2002) and Booij (2005) are known to support this approach.

Fabb (1988) shows the inadequacy of trata approach and claims that "English suffixation is constrained only by selectional restrictions". He believes that there exist various selectional restrictions on suffixation which cut down the number of potential suffix pairs. On the basis of the analysis of 43 English suffixes and by looking at all the cases of double suffixation which exist in his data, Fabb proposes the following types of suffixes: 1) many suffixes never attach to an already-suffixed word. 2) Some suffixes attach outside only one other particular suffix. 3) Some suffixes attach freely. 4) Some problematic suffixes. He continues with examples and explanations for each group.

A few researches have been done in Persian with regard to selectional restrictions. Abbasi (2005), Rafiei (2007), Hemasiyan (2010) and Karami (2009) are exemplary among a few dissertations done in this regard.

2. Selectional Restrictions

Selectional restrictions which have been dealt with in this research will be illustrated in the following section.

2.1 Grammatical Restrictions

Grammatical restrictions limit suffixes' attachment to bases in such a way that they cannot attach to any desired grammatical category. For example, in the case of the Persian suffix «چی-»/-ĉi/ we see that it does not accept any kind of verbs as a base, and all the bases are in form of nouns. Like the following;

پستچی	گمرکچی
/post-ĉi/	/gomrok-ĉi/
post-man	costumes-man

2.2 Semantic Restrictions

Semantic restrictions are among other constraints which limit the number of the actual words. In our attempt to get to semantic restrictions we have referred to Rafiei (2007). Categories and sub-categories which have been submitted by Rafiei (2007) are: concrete, abstract and dynamic nouns, dynamic and non-dynamic adjectives, dynamic and non-dynamic verbs, and adverbs.

2.3 Phonological Restrictions

Another restriction which still blocks the way of suffixes is a phonological one. Phonological restrictions rule out phonologically unfamiliar and even unbeautiful combinations of suffixes and bases. Non-existing word forms like «بندنده*»/bænd-ænde/, «نشیننده*»/neʃin-ænde/, میله «کک*»/mile-æk/, and «سنگگر*»/sæang-gær/ are phonologically problematic in Persian and so don't enter language.

2.4 Morphological Restrictions

Morphological restrictions are applied in morphological domains. For example the word form «بریدنده*»/bor-id-ænde/ doesn't exist in Persian because the suffix «نده-»/-ænde/ accepts present stem form of verbs and not past stem forms like «برید»/bor-id/ which is a past stem form of its verb.

2.5 Pragmatic Restrictions

Pragmatic restrictions limit suffixes based on the use of language. They are applied on structurally possible derived words (Plag 2002b: 75). This means that these combinations must have passed through grammatical, semantic, phonological and morphological constraints. Useful neologism, necessity of labeling, homonymous, psychological, sociological, stylistic and aesthetic constraints act as pragmatic factors which are applied on derivational suffixes.

2.5.1 Useful Neologism

Words come into existence if only there's a need for them in language, and if a given concept has already assigned a specific word for itself there's no need to assign another one (Bauer 2001: 43 & 208, Plag 2003: 23, Plag 2003: 73, Plag 2002b: 73 & 74). Kiparsky (1983) calls this Avoid Synonymy Principle. For instance the word form «انگورستان*/»/ængur-estɑn/, meaning vineyard, doesn't enter into Persian because the word «موستان»/mo-v-estɑn/ is already present there.

2.5.2 Necessity of labeling

Words come into existence if they stand for namable concepts. In other words, creating words for concepts which cannot even be thought of is unnecessary. For instance, in comparison to words such as «آهنگر»/ɑhan-gær/ which refers to a person who works with iron («آهن»/ɑhæn/ in Persian) and makes things out of it, the word form «کامپیوترگر*»/copmijuter-gær/, referring to a person who works on computers to shape things out of them, doesn't exist because in fact there's no such a thing in real world.

2.5.3 Aesthetics

Different people have different aesthetic standards, and this makes it difficult to investigate aesthetic restrictions. Perhaps it can be said that all constraints which stand on the way of productivity (of making new words) are aesthetic in nature (Abbasi 2005: 121). Written or pronounced ill-forms and complexity can also be considered as factors involved in aesthetic constraints (Al'ami 1989: 36, Kafi 1996: 313).

3. Data Analysis

Structural and pragmatic selectional restrictions have been introduced in the previous sections. From now on, grammatical, semantic, phonological, morphological, useful neologism, necessity of labeling and aesthetic constraints on the Persian derivational suffix «انه-»/-ɑne/ will be presented.

"Grammarians consider «انه-»/-ɑne/ as a suffix containing some sense of resemblance, relation or capability. Some contemporaries have followed such an opinion, either. They remark that bases are adjectives and consider «انه-»/-ɑne/ as an adverb forming or an adjective forming suffix. And in some cases these adjectives are considered to imply state, manner or nouns (Sadeghi 1993c: 23-24).

3.1 Grammatical Restrictions

To attain grammatical constraints, after putting derived words ending in «انه-»/-ɑne/ which have been gathered from Zansoo dictionary, in the contemporary dictionary of Sadri Afshar, and eliminating the old words in this way, 77 derived words ending in «انه-»/-ɑne/ are obtained. There are 45 words with adjectival bases, 29 ones with noun-form bases, and only 2 cases of Verbal bases among these data. Derived words belong to the categories of nouns, adverbs and adjectives. Based on the categories gained from our data, we can conclude that grammatical constraints governing this suffix don't allow the addition of «انه-» to bases other

than nominal, adjectival and verbal ones. Likewise the result of attaching «انه-» to nominal, adjectival and verbal bases is the adjectival derived words. Some of these words are as follows:

مودبانه	شبانه	مستانه	ماهانه	پسرانه
/moaddæb-ɑne/	/ʃæb-ɑne/	/mæst-ɑne/	/mɑh-ɑne/	/pesær-ɑne/
polite-ly	night-ly	drunk-ly	month-ly	boy-ish
politely	at night	in a drunk manner	monthly	boyish

3.2 Semantic Constraints

After getting at permissible grammatical categories which can stand next to «انه-» we go to investigate proper sub-categories involved in this process. Sub-categories which appear in adding proper grammatical bases to «انه-» are abstract and concrete nouns, different kinds of adjectives and also adverbs. For instance concrete nouns «پسر»/pesær/ meaning "boy" and «پدر»/pedær/ meaning "father",«دزد» /dozd/ "thief", «دیو»/div/ "demon", and «شاه»/ʃɑh/ "king" attach to «انه-»/-ɑne/ and make the following adjectives:

پسرانه	پدرانه	دزدانه	دیوانه	شاهانه
/pesær-ane/	/pedær-ane/	/dozd-ane/	/div-ane/	/ʃah-ane/
boyish	fatherly	stealthy	insane	royal

And the adjectives «عجول»/æʤul/ meaning "hasty", «ناشی»/nɑʃi/ meaning "novice", «مخفی»/mæxfi/ "hidden", «عامی»/ɑmi/ "ignorant", «عاقل»/ɑqel/ "wise", and «محترم»/mohtæræm/ "respectable" make adverbial derived words as the following:

عجولانه	ناشیانه	مخفیانه	عامیانه	عاقلانه	محترمانه
/æʤul-ane/	/naʃi-j-ane/	/mæxfi-j-ane/	/ami-j-ane/	/aqel-ane/	/mohtæræm-ane/
hastily	clumsily	secretly	slangy	wisely	respectably

3.3 Phonological Constraints

It is expected that phonological restrictions prevent the emergence of cases that are phonetically odd and disturb phonological rules of language. These constraints also apply on cases which have passed through grammatical and semantic restrictions. It seems that «انه-» is going to have problems attaching to bases ending in vowel sounds because this suffix starts with /ɑ/ which is a front vowel sound and phonetic rules of Persian don't accept such a thing owing to the fact that no vowel sounds can stand side by side in Persian. Reviewing the derived words ending in «انه-» in our data it comes out that the only bases which end in vowel sounds and still stand next to this suffix are the verb «رو»/ro/ meaning "go" ending in the front vowel /o/ and the noun «آرزو»/ɑrezu/meaning "wish" ending in the front vowel /u/. In these cases the verbal base «رو»/ro/ undergoes phonetic changes and becomes «روانه»/ræv-ane/ and the nominal base «آرزو»/ɑrezu/ inserts the phoneme /v/ as an epenthesis and becomes «آرزوانه» /ɑrezu-v-ane/. No cases of attachments of bases ending in the front vowel /

ɑ/ to /-ɑne/ are observed in our data and nor in the author's intuition. The only back vowel sound which is observed on bases that attach to «انه-»/-ɑne/ is /i/. These kinds of bases insert the phoneme /j/ as an epenthesis. Like the word «صوفی»/sufi/ which changes into «صوفیانه»/sufi-j-ɑne/. The words «ناشیانه»/naʃi-j-ɑne/ and «مخفیانه»/maxfi-j-ɑne/ meaning "clumsily" and "secretly" can also be named in this regard. Bases ending in the back vowels /e/ and /æ/ do not exist in the data. In other words we can conclude that phonological constraints, based on phonological rules and standards of language, prevent «انه-»/-ɑne/ from attaching to bases ending in a vowel sound. And as a result, in case of attachment, these kinds of bases undergo phonetic changes or insert a phoneme before the suffix as an epenthesis. As the bases «رها»/ræhɑ/ "free",«جفا» / ʤæfɑ/ "anguish", and «پیدا»/peydɑ/ "clear" don't attach to «انه-»/-ɑne/ and so non-existing word forms «رهاآنه*»/ræhɑ-ɑne/, «جفاآنه*»/ʤæfɑ-ɑne/, and «پیداآنه*»/peydɑ-ɑne/ are blocked by phonological restrictions and don't enter language in use. Indeed, in these cases aesthetic restrictions can be seen beside phonological constraints because two adjacent vowels don't seem beautiful based on aesthetic criteria in Persian and hence aesthetic constraints add to the restrictions and block the way as well.

3.4 Morphological Restrictions

There are many grammatically, semantically and phonologically appropriate bases in Persian which still don't attach to «انه-»/-ɑne/ because of morphological restrictions. These cases are mostly found in complex bases. The suffix «انه-»/-ɑne/, in combination with complex bases, only attaches to bases ending in the derivational suffixes «بان-»/-bɑn/, «مند»/-mænd/, «گر-»/-gær/, «وار-»/-vɑr/, and «ی-»/-y/. And if a complex base ends in a suffix other these ones, «انه-»/-ɑne/ won't participate in derivation due to morphological restrictions. Words such as «مهربانانه»/mehr-æ-ban-ɑne/ "kindly", «نوازشگرانه»/nævaz-eʃ-gær-ɑne/ "caressingly", «آبرومدانه»/ɑ beru-mæand- ɑ ne/ "respectably", and «بزرگوارانه»/bozorg-v ɑ r- ɑ ne/ "magnanimous" aren't blocked by morphological constraints and cases such «هولناکانه*»/hol-n ɑk-ɑne/ "terribly" «اخموانه*»/æxm-u-ɑne/ "in a moody manner/", and «راستینانه*»/rɑst-in-ɑne/ "truly" despite being accepted by grammatical, semantic and phonological restrictions, don't enter language because of morphological constraints. By and large the suffix «انه-», in addition to attaching to both simple and derived bases, can be added to compound bases, too. Words such as «دوستانه»/dust- ɑ ne/ "friendly", «خصمانه»/xæsm- ɑ ne/ "inimically" and «غاصبانه»/qɑseb-ɑne/ "in an oppressing manner" have simple form bases and words like «شرافتمندانه»/ʃerafæt-mænd- ɑ ne/ "honorable", «خردمندانه»/xeræd-mænd- ɑ ne/ "wisely" and «نامردانه»/nɑ-mærd-ɑne/ have derivational bases and «داوطلبانه»/dɑv-tælæb-ɑne/ "voluntarily" has a compound base.

3.5 Pragmatic Restrictions

Pragmatic restrictions which operate based on the use of language not only exist in Persian but also are so active. These kinds of restrictions namely useful neologism, necessity of labeling and aesthetic constraints are deliberated in this paper.

3.5.1 Useful Neologism

In some cases adding derivational suffixes to some structurally acceptable bases creates

concepts that speakers don't even need them, and therefore such word forms are blocked by useful neologism restrictions. For example words such as «همسایه»/hæmsɑje/ "neighbor", «دکتر»/doktor/ "doctor", and «نوه»/næve/ "grandchild" which are concrete nouns and also words like «جوان»/ʒævɑn/ "young", «مریض»/mæriz/ "sick", «خلاف»/xælɑf/ "foul", «کندهوش»/kond-huʃ/ "unclever", «نادان»/nɑdɑn/ "ignorant" which are dynamic adjectives, despite passing through structural restrictions, can't stand next to «-انه»/-ɑne/ as its base, because the emergence of the concepts «همسایهانه*»/hæmsɑje-ɑne/ "*neighborly", «دکترانه*»/doktor-ɑne/ "*doctorly", «نوهانه*»/næve-ɑne/ "*grandchildly", «جوانانه*»/ʒævan-ɑne/ "*youngly", «مریضانه*»/mæriz-ɑne/ "*sickly", «خلافانه*»/xælɑf-ɑne/ "*foulishly", «کندهوشانه*»/kond-huʃ-ɑne/ "*uncleverly", and «نادانانه*»/nɑdɑn-ɑne/ "ignorantly" is useless and therefor useful neologism restrictions block the way of these forms into language. It also should be noted that these cases that have been kept out of use by useful neologism restrictions, are in fact possible word forms which have the potential to enter language in case of need.

3.5.2 Necessity of Labeling

There exist some bases in language which face no structural restrictions in standing beside derivational suffixes, but the word forms they make in such way are redundant because before this process proceeds, language has assigned related words for the concepts which these combinations are going to convey. So necessity of labeling restrictions is activated and blocks the way of such combinations into language. This is also true about the suffix «-انه». For example, the non-existing word forms «بلدانه*»/bæalæd-ɑne/ "skillfully", «نابلدانه*»/nɑ-bælæd-ɑne/ "not skillfully", «بیگناهانه*»/bi-gonɑh-ɑne/ "innocently", «تهدیدانه*»/tæhdid-ɑne/ "offensive", «ساعتانه*»/sɑʔæt-ɑne/ "every hour", «قایمانه*»/qɑjem-ɑne/ "*hidely", «ادبانه*»/ʔædæb-ɑne/ "politely", «ظهرانه*»/zohr-ɑne/ "luch", and «رژیمانه*»/reʒim-ɑne/ "*dietly" despite having structurally not restricted bases do not enter language and still remain as potential word forms because language has already registered equivalent words for such concepts. The actual words «ماهرانه»/mɑher-ɑne/, «ناشیانه»/nɑʃi-j-ɑne/, «معصومانه»/mæʔsum-ɑne/, «تهدیدآمیز»/tæhdid-ɑmiz/, «هرساعت»/hær sɑʔæt/, «مخفیانه»/mæxfi-j-ɑne/, «مؤدبانه»/moʔæddæb-ɑne/, «نهار»/nɑhɑr/, and «پرهیزانه»/pærhiz-ɑne/ are well in use in Persian and hence become the proper cues for necessity of labeling restrictions to block the other word forms for these concepts.

3.5.3 Aesthetic Constraints

Word formations which create derivatives contrary to aesthetic standards of a given language are blocked by aesthetic restrictions. It seems that these kinds of restrictions can never block the way of potential word forms just by themselves, and always appear beside other restrictions, especially phonological ones, to reinforce them. In cases involving «-انه» phonetic changes in bases ending in the phoneme /o/ like the verb «رو»/ro/ which changes into «روانه»/rævɑne/ or inserting a phoneme as an epenthesis which are all due to phonological restrictions, seem to be more beautiful too. Also cases such as «اخموانه*»/æxm-u-ɑne/ "*moodyly" which have been blocked by morphological restrictions, because its base ends in the derivational suffix «-و»/-u/, do not accord with aesthetic

constraints. It seems that aesthetic restrictions are hand in hand with useful neologism and also with necessity of labeling constraints in cases such as «نابلدانه*»/na-bælæd-ane/ and «نادانانه*»/na-dan-ane/, because these cases are not only unfamiliar to our ears but also are unbeautiful. However, it should be mentioned that aesthetic restrictions are to a large extent subjective and no one can strictly call a given form beautiful or unbeautiful. Table (1) shows selectional restrictions of «انه-» which have been discussed above:

Table 1. Selectional restrictions of the derivational suffix /-ane/

suffix / selectional restrictions	/ane/		examples
grammatical	**grammatical restrictions on bases**	**grammatical categories of derivatives**	/moædæb-ane/ مؤدبانه /vijar-ane/ ویارانه /sal-ane/ سالانه
	nouns, adjectives, verbs	nouns, adjectives, adverbs	
semantic	**semantic restrictions on bases**	**semantic sub-categories of derivatives**	/ʃokr-ane/ شکرانه /ʤæsur-ane/ جسورانه /maher-ane/ ماهرانه /ʔaʤez-ane/ عاجزانه /bejʔ-ane/ بیعانه /kudæk-ane/ کودکانه
	concrete nouns, abstract nouns, adjectives, verbs	concrete nouns, adjectives, adverbs	
phonological	not attaching to bases ending in vowels/ making phonological changes or inserting epenthesis on bases ending in vowels		/ro/+/ane/→/ræv-ane/ روانه /ɑrezu/+/ɑne/→/ɑrezu-v-ɑne/ آرزوانه /mæxfi/+/ɑne/→/maxfi-j-ɑne/ مخفیانه
morphological	capable of attaching to derivational bases ending in each of the derivational suffixes of /-ban/, /-gær/, /-mænd/, /var/, /u/, or /j/ / not attaching to bases ending in other derivational bases		/mehr-ban-ane/ مهربانانه /ɑberu-mænd-ɑne/ آبرومندانه /bozorg-var-ane/ بزرگوارانه /hol-nak-ane/ هولناکانه*

		/rɑst-in-ɑne/	راستینانه*
	capable of attaching to simple, compound and derivative bases	/ʃer ɑ fæt-mænd- ɑ ne/ شرافتمندانه /xeræd-mænd-ɑne/ خردمندانه	
pragmatic	**necessity of labeling**	/doktor-ɑne/	دکترانه*
	useful neologism	/saʔæt-ɑne/	ساعتانه*
	aesthetic	/æxmu-ɑne/	اخموانه*

4. Conclusion

Grammatical restrictions governing the derivational suffix «انه-»/-ɑne/ block its attachment to bases other than nouns, adjectives, and adverbs and thereby nominal, adjectival and adverbial categories are brought about. Semantic restrictions select concrete and abstract nouns, adjectives and verbs as proper bases for «انه-»/-ɑne/ and consequently derivatives which are in forms of concrete nouns, adjectives and adverbs emerge. Because of constraints applied by phonological restrictions on «انه-»/ɑne/, this suffix doesn't attach to bases ending in vowels and if it does so, some phonological changes apply on the bases or epenthesis happens between the bases and the suffix. Morphological restrictions allow «انه-»/-ɑne/ to attach to simple, compound and derived bases ending in derivational suffixes «بان-»/-b ɑ n/, «گر-»/gær/, «مند-»/mænd/, «وار-»/vɑr/ and«ی-» /j/, but restrict it from attaching to derived bases ending in other derivational suffixes.

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