

Persian Preposition Classes

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Abstract

In this paper I present the prepositional system of Persian. I show that Persian prepositions can be divided into three classes (Class 1, Class 2a and Class 2b) which exhibit distinct syntactic behavior. Then I examine the question of the categorial status of Class 2 prepositions and demonstrate that they are not to be regarded as nouns. Finally I present the extended PP projection of Persian spatial prepositions and argue for a feature-based analysis of the properties they manifest.

1. Introduction

Traditionally, Persian prepositions are divided into two main classes with respect to the Ezafe linker: Class 1 (abbreviated C1 Ps) and Class 2 (abbreviated as C2 Ps). Samiiian (1994), Karimi and Brame (1986), Lazard (1957) and others agree that the first class of prepositions are true prepositions since they never take the Ezafe linker. However, the categorial status of Class 2, containing prepositions that generally occur with Ezafe, is rather controversial, the two hypotheses being that [a] they are nouns (Karimi and Brame 1986, Ghomeshi 1997) or [b] they are prepositions (Samiian 1994). Class 2 prepositions can be further divided into two subclasses, as first proposed by Samiiian (1994): Class 2a containing prepositions with optional Ezafe, and Class 2b containing those with obligatory Ezafe. This paper gives an overview of the prepositional classes in Persian and examines the different properties of each class in an attempt to determine the categorial status of the spatial Class 2 prepositions and their place in the P projection, as well as to offer a possible explanation of the syntactic properties they manifest.

The paper is organized as follows. Section 2 will start out as a basic presentation of the Ezafe linker in Persian and the existing hypotheses accounting for its insertion. Section 3 will subsequently present the division of Persian prepositions into three different classes. In Section 4, I will examine the differences in the syntactic behavior of the prepositions that belong to the different classes. First, I will turn to a comparison of the two main classes, namely Class 1 versus Class 2. Then I will focus on the differences between prepositions in Class 2a as compared with Class

* I would like to thank Peter Svenonius, especially for the useful suggestion he made with respect to the hypothesis I present in Section 7 of this paper.

2b and, finally, I will present the possibilities for combining prepositions with each other. Section 5 brings up the issue of the categorial status of Class 2 prepositions and here I will argue that they are distinct from nouns. In Section 6, taking Svenonius' (2005-06) work as a point of departure, I present the tree structure for Persian prepositional phrases. In Section 7, I present a hypothesis explaining the ambivalent behavior of Class 2a prepositions. Section 8 concludes the paper.

2. Persian Ezafe

2.1. Basic facts

For the purpose of understanding the syntactic behavior of Persian prepositions and subsequently classifying them, a more detailed introduction into the phenomenon known as Ezafe is necessary.

Ezafe is the common term for a linking vowel used to indicate a relationship between sub-constituents of an NP. In Persian it is phonologically realized as an unstressed vowel which appears after certain word classes. When attached to a word ending in a consonant, Ezafe is pronounced as an unstressed /e/. When attached to word ending in a vowel, Ezafe is pronounced as an unstressed /je/ (spelled as -ye in the examples).

Generally speaking, Ezafe attaches to nouns and pronouns when they are followed by a modifier,¹ be it an attributive adjective (see (1)) or a modifying noun (as in 2). The most common Ezafe construction apart from noun modification is the possessive construction (see (3)). Interestingly, the majority of Persian prepositions have the Ezafe linker before the noun phrase or pronoun they take as their complement (see (4)).²

- | | | | | |
|-----|----|---|----|---|
| (1) | a. | xane- ye bozorg
<i>house-EZ big</i>
'big house' | b. | mæn- e divune
<i>I-EZ crazy</i>
'crazy me' |
| (2) | | kif- e chærm
<i>bag-EZ leather</i>
'leather bag' | | |
| (3) | a. | ketab- e Mina
<i>book-EZ Mina</i>
'Mina's book' | b. | ketab- e un
<i>book-EZ s/he</i>
'her/his book' |

¹A common view is that Ezafe never attaches to a noun modified by a relative clause. However, according to Ortmann (2002) the special relative clitic *-i*, which attaches to nouns modified by a restrictive relative clause, is an allomorph of the Ezafe morpheme.

²Glosses are as follows: EZ - Ezafe vowel, S - singular, PL - plural, 1,2,3 - 1st, 2nd, 3rd person, OM - object marker, CL - clitic.

do not take Ezafe (i.e. Class 1) and those which take Ezafe (i.e. Class 2).³ C1 Ps possess all the properties associated with prepositions, including the ability to directly assign case. C2 Ps, on the contrary, exhibit some nominal properties including the inability to assign case.⁴

In order to explain the syntactic behaviour of C2 Ps, Samiiian adopts the Neutralization Hypothesis for German adjectives (for which she cites work by van Riemsdijk). Under this proposal, German adjectives are neutralized in their [+N] feature, that is, they are specified only for the [+V] feature, rather than fully specified [+V,+N] elements. Consequently, as a [+V] category they are non-distinct from the [+V,-N] category, i.e. from verbs. This provides an explanation for the fact that adjectives and [-N] categories in German share some properties, namely, they all can assign case.

Following the same line of reasoning, Samiiian suggests that C2 Ps are neutralized with respect to their [-N] feature, thus they have only the feature specification [-V]. The full paradigm of Persian lexical categories is given in (6).

(6)	N:	[-V,+N]	V:	[+V,-N]	
	A:	[+V,+N]	C1 Ps:	[-V,-N]	
			C2 Ps:	[-V]	(Samiian 1994:38 ex. (46))

C2 Ps are left with only the feature [-V] which makes them unable to assign case, since according to Samiiian only categories specified for [-N] are case-assigners. Therefore, C2 Ps have to make use of a special device, more specifically the dummy case assigner Ezafe, in order to be able to take complements.

2.2.2. Ghomeshi (1996): PF insertion rule

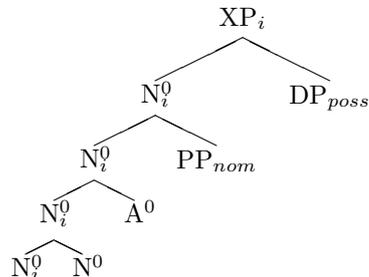
Ghomeshi (1996) explains the property of the Ezafe linker by arguing that nouns in Persian do not project to a maximal category on their own. Given this, no phrasal constituent can appear within the noun phrase, hence Persian noun phrases consist of X^0 -adjoined heads. In other words, all attributive modifiers within the NP are heads (cf. (7)).⁵

³The labels used by Samiiian herself are P1 and P2 for Class 1 and Class 2, respectively. In this paper, I will stick to the labels presented in the introductory section.

⁴It is important to note that despite assuming that C2 Ps have certain nominal properties, Samiiian presents convincing evidence against the claim that they are nouns.

⁵The subscripts indicate the headedness of the phrase. DP_{poss} is the label for the possessor phrase, P_{nom} is the label for ‘nominal prepositions’, which is Ghomeshi’s term for those prepositions that take their complement via the Ezafe linker, i.e. the C2 Ps.

(7)



(Ghomeshi 1996: 95 ex. (2))

Further, she argues that adjectives too can surface as non-projected A^0 s. When it comes to prepositions, Ghomeshi adopts the division suggested by Samiiian (1994), namely a C1 category and a C2 category. C1 Ps obligatorily project to phrases and never take Ezafe. Ghomeshi considers the C2 Ps that can appear with an optional Ezafe and states that they either project (and appear without Ezafe) or do not project to a phrase (in which case they take their complement via Ezafe). The C2 Ps with obligatory Ezafe never project to a phrase.

Ghomeshi (1996) uses a PF insertion rule to account for the Ezafe vowel.

- (8) **Ezafe Insertion Rule:** Insert the vowel -e on an X^0 that bears the feature [+N] and is followed by a non-affixal constituent within the same extended projection. (Ghomeshi 1996:132 ex. (79))

In other words, the function of the Ezafe vowel is to link non-projecting [+N] heads to the elements they form a constituent with in order to identify them as such. Crucial for Ghomeshi's analysis is the suggestion that the nominal C2 prepositions bear the feature [+N], thus forming a natural class with nouns and adjectives. Since the Ezafe vowel appears only on these three categories, and never on verbs and adverbs, Ghomeshi proposes that the trigger for the Ezafe insertions is the [+N] feature.

2.2.3. Kahnemuyipour (2000): Syntactic movement

Kahnemuyipour (2000) provides an explanation for Ezafe insertion based on syntactic movement.

He notes that if Ezafe were a marker inserted only to identify constituenthood, as proposed by Ghomeshi (1996), then the order of the modifier and the noun would be irrelevant. However, there are cases in Persian where the adjective precedes the noun and no Ezafe is inserted (cf. (9)).⁶ Moreover, the Ezafe vowel is ungrammatical in this context.

⁶Ghomeshi (1996) takes these to be cases of lexicalization and considers them as compounds. However, this doesn't explain the fully productive case of adjectives in the superlative form, which are always used preminally and obligatorily without Ezafe.

Ezafe is a special case-marking device used to enable non-case assigning categories to take complements. The non-case-assigners are, according to her, the [+N] categories and the C2 category, the latter being neutralized with respect to its [-N] feature. Thus, prepositions belonging to this class pattern with nouns and adjectives in that they cannot assign case.

Ghomeshi (1996) rejects Samiiian’s claim that the Ezafe is present for case reasons. Her account builds on the assumption that the Ezafe domain is an X^0 -adjoined structure and that all modifiers within it are heads. The Ezafe is then attached to any element bearing the [+N] feature in order to identify constituenthood.

Larson and Yamakido (2005) further develop Samiiian’s proposal about Ezafe as a dummy case marker and suggest that all modifiers are generated postnominally. Bearing the feature [+N], they need case, and that is where Ezafe kicks in. English prenominal modifiers, on the contrary, have to move up to get case-licensed by the determiner, since English has no case-marking device corresponding to the Persian Ezafe.

One additional approach presented here is the syntactic movement account put forward by Kahnemuyipour (2000). Contrary to Larson and Yamakido (2005), he assumes that all modifiers are generated prenominally and bear a strong feature [Mod] which serves as a trigger for the modified noun to move up, thus obtaining its surface position. Ezafe is then the morphological realization of the feature [Mod].

Interestingly, all accounts presented above face their biggest challenge when it comes to explaining the syntactic behavior of Persian prepositions, more specifically the nominal (Class 2) prepositions. Kahnemuyipour doesn’t deal with them at all, while Ghomeshi and Larson and Yamakido assume that they are nouns, or at least that they have the [+N] feature.

The account which will be assumed in the current paper is the one proposed by Samiiian (1994). The reason for this is that her proposal has one clear advantage compared to the others, namely, she is still able to maintain the distinction between nouns and C2 prepositions.

3. Persian Preposition Classes

As already mentioned, the Ezafe linker provides a criterion for classifying Persian prepositions. Traditionally they are divided into two classes, the members of which manifest differences in their syntactic behavior.

- **Class 1** Prepositions – reject the Ezafe morpheme (*be* ‘to’, *dær* ‘at’, *æz* ‘from/via’, *ta* ‘up to’, *bær* ‘on’)
- **Class 2** Prepositions – allow or require Ezafe when followed by a complement (*ru(-ye)* ‘on’, *zir(-e)* ‘under’, *posht-e* ‘behind’, etc.). This class is fairly open and contains most Persian prepositions. Historically, C2 Ps have originated from nouns and adverbs and some of them still exist as real nouns.

PERSIAN PREPOSITION CLASSES

An illustration of the unavailability of the Ezafe vowel on C1 Ps and its grammaticality with C2 Ps is shown in (10).

- (10) a. *æz_{C1}-e miz
 from-EZ table
 b. zir_{C2}(-e) miz
 under-EZ table

Following the idea first suggested by Samiian (1994) I will make a more fine-grained distinction of C2 prepositions with respect to the optionality or obligatoriness of the Ezafe marker. This issue is touched on in Karimi and Brame (1986), too, who list what they call ‘mixed’ prepositions.

Class 2 prepositions can be divided into the following two subclasses:

- **Class 2a:** prepositions with optional Ezafe
- **Class 2b:** prepositions with obligatory Ezafe

A list of prepositions can be seen in Table 1.⁷

CLASS 1		CLASS 2A		CLASS 2B	
<i>dær</i>	‘at’	<i>tu(-ye)</i>	‘in’	<i>daxel-e</i>	‘inside’
<i>be</i>	‘to’	<i>ru(-ye)</i>	‘on’	<i>tæh-e</i>	‘on the bottom’
<i>ta</i>	‘up to’	<i>jelow(-ye)</i>	‘in front of’	<i>posht-e</i>	‘behind’
<i>æz</i>	‘from, via’	<i>pæhlu(-ye)</i>	‘beside’	<i>næzdik-e</i>	‘near’
<i>bær</i>	‘on’			<i>paiin-e</i>	‘below’
<i>bi</i>	‘without’			<i>xarej-e</i>	‘outside’
<i>ba</i>	‘with’			<i>birun-e</i>	‘outside’
<i>chun</i>	‘like’			<i>mian-e</i>	‘between’
<i>joz</i>	‘except’			<i>dour-e</i>	‘around’
					etc.

Table 1 Classification of Persian prepositions according to the Ezafe linker. Class 1: no Ezafe, Class 2a: optional Ezafe, Class 2b: obligatory Ezafe

However, there is variation among speakers with respect to the classification of some prepositions. In the linguistic literature, too, there is some disagreement as to whether certain prepositions should be classified as Class 1, Class 2a or Class 2b. Table 2 illustrates this variance. The controversial prepositions are listed in the leftmost column. Then, the varied affiliation of each preposition to a particular class is shown by listing the name of the

⁷It should be noted that Class 2b contains many more prepositions, including non-spatial ones. However, since the topic of the paper is the spatial Ps, I give examples only of those. The lists of Class 1 and Class 2a Ps are exhaustive.

author, according to whom the prepositions in question belong to a certain class, in the column headed by the corresponding class. For example Samiian (1994) classifies *bæraye* as a Class 1 preposition, whereas Karimi and Brame (1986) include it in the list of prepositions with optional Ezafe (that is *bæra(-ye)*) and Mace (2003) regards it as a Class 2b preposition with obligatory Ezafe (that is *bæra-ye*).

	CLASS 1	CLASS 2A	CLASS 2B
<i>bæraye</i> ‘for’	Samiian (1994) Mahootian (1997)	Karimi and Brame (1986)	Mace (2003)
<i>bedune</i> ‘without’	Samiian (1994)		Mahootian (1997) Karimi and Brame (1986) Mace (2003)
<i>sære</i> ‘on, at’	Samiian (1994)		Mahootian (1997) Karimi and Brame (1986) Mace (2003)
<i>kenare</i> ‘beside’		Karimi and Brame (1986)	Samiian (1994) Mace (2003) Mahootian (1997)
<i>balaye</i> ‘over’		Karimi and Brame (1986)	Mahootian (1997) Samiian (1994)
<i>zir</i> ‘under’		Samiian (1994)	Mahootian (1997) Karimi and Brame (1986)

Table 2 Classification of controversial prepositions according to various authors

The case of benefactive ‘for’ is particularly indicative of the difficulties which arise in the attempt to clearly define prepositional classes once and for all. As Table 2 shows, *bæraye* has been assigned to each of the three classes by one author or another. In general, prescriptive grammarians tend to list the controversial prepositions as C2b prepositions.

Assuming that the lack of Ezafe on a preposition reveals its more ‘functional’ nature, it is plausible that C1 prepositions have shifted class historically, which has resulted in the loss of the Ezafe vowel before their complement. However, it is quite unexpected that the first three prepositions in Table 2 classified as C1 by Samiian do have the Ezafe ending. Samiian (1994:24, n. 6) mentions that they historically originate as Class 2 prepositions but that synchronically they are regarded as pure functional words, the Ezafe being reanalyzed as part of the lexical item. This would be a counter-argument for the possible historical development suggested above, since most of the C1 Ps do not end with *-e*. In this view, it is unclear why *bedune*, *sære* and *bæraye* have retained it.

I will return to the question whether *sære* ‘on, at’ should be regarded as a C1 P in §4.1.⁸ For the time being, I will adopt Samiiian’s classification of Persian prepositions and put aside the discussion of the possible historical development they might have undergone, since it is not crucial for the main issues handled in this paper.

4. Syntactic distinctions among Persian preposition classes

In addition to the availability of the Ezafe linker, there are further distinctions in the syntactic behavior of Class 1 and Class 2 prepositions. Furthermore, Class 2a and Class 2b prepositions differ in some respects, too. Another interesting issue is whether Class 2a prepositions, which take Ezafe optionally, have different properties when they have Ezafe and when they do not. These question will be discussed in the following subsections.

4.1. Syntactic distinctions between Class 1 and Class 2 prepositions

Class 1 and Class 2 prepositions exhibit a series of distinct syntactic properties. First, Class 2 prepositions, but not Class 1, can occur without a complement in which case obligatorily without Ezafe (12b).

- (11) C1 P *æz* ‘from’
- a. *tup oftad æz miz*
ball fell from table
‘The ball fell from the table’
 - b. **tup oftad æz*
ball fell from
- (12) C2 P *zir* ‘under’
- a. *tup oftad zir-e miz*
ball fell under-EZ table
‘The ball fell under the table’
 - b. *tup oftad zir(*-e)*
ball fell under-EZ
‘The ball fell down’

Secondly, Class 2 Ps can follow a demonstrative (14b) whereas Class 1 Ps are ungrammatical when preceded by a demonstrative.

⁸I will not deal with the classification of *bedune* ‘without’ and *bæraye* ‘for’, since they are not spatial prepositions.

- (13) C1 P *dær* ‘at, in’
- a. ketab *dær* keshu bud
book in drawer was
 ‘The book was in the drawer’
- b. *ketab in *dær* keshu bud
book this in drawer was
- (14) C2 P *tu* ‘in, inside’
- a. ketab *tu(-ye)* keshu bud
book in-EZ drawer was
 ‘The book was in the drawer’
- b. ketab in *tu-ye* keshu bud
book this in-EZ drawer was
 ‘The book was here in the drawer’

When C2 Ps follow a demonstrative they can take plural morphology (15).

- (15) shekær rixt in zir-ha-ye miz
sugar spilled this under-PL-EZ table
 ‘The sugar spilled here all over under the table’

Thirdly, C2 Ps, but not C1 Ps, can appear in case positions on Larson and Yamakido’s (2005) analysis, for instance as modifiers joined to NPs by Ezafe (16b) or in argument position (17b).

- (16) a. *ketab-*e* *dær* keshu-ra næ-did
book-EZ in drawer-OM not-saw
 ‘S/he didn’t notice the book in the drawer’
- b. tup-*e* zir-*e* miz-ra næ-did
ball-EZ under-EZ table-OM not-saw
 ‘S/he didn’t notice the ball under the table’
- (17) a. **dær* keshu tarik-*e*
in drawer dark-is
- b. daxel-*e* keshu tarik-*e*
inside-EZ drawer dark-is
 ‘It is dark in the drawer’

Another distinction in the syntactic behavior of C1 Ps as opposed to C2 Ps is the availability of pronominal clitics. The clitic endings in Persian are all vowel-initial (in fact, they all begin with /e/), but when the host of the clitic ends in a vowel distinct from /e/, the initial vowel of the clitic is either deleted (18a), or the glide /j/ is inserted between the final vowel of the host and the initial vowel of the clitic (18b). If two /e/ vowels come together, the only option is to delete one of the vowels, presumably that of

the clitic (19).⁹

- (18) ru+esh →
on+3S.CL
 a. ru-sh
 b. ru-y-esh
- (19) be+esh → be-sh
to+3S.CL

Pronominal clitics can be attached to the end of a verb to indicate a definite direct object.

- (20) diruz did-æm-esh
yesterday saw-1S-3S.CL
 ‘I saw him/her/it yesterday’

They also serve to express the possessor in possessive constructions by attaching to the possessed noun.

- (21) diruz bæradær-esh did-æm
yesterday brother-3S.CL saw-1S
 ‘I saw his/her brother yesterday’

For the classification developed in this paper, it is important that pronominal clitics can be complements of prepositions. Crucially, they never attach to Class 1 prepositions when used with locative or directional meaning.

- (22) C1 P *æz* ‘from’
 a. *æz mænzel amæd*
from house came-3S
 ‘S/he came from the house’
 b. **æz-esh amæd*
from-3S.CL came-3S
 ‘S/he came from it’
- (23) C2 P *ru* ‘on’
 a. *sib oftad ru(-ye) miz*
apple fell on(-EZ) table
 ‘The apple fell on the table’
 b. *sib oftad ru-sh*
apple fell on-3S.CL
 ‘The apple fell on it’

It is noteworthy that in colloquial Persian the majority of C1 prepositions (e.g. *ba* ‘with’, *æz* ‘from’, *be* ‘to’) allow combination with pronominal clitics

⁹For more examples the reader is referred to Mace 2003:68 and Mahootian 1997:138, 337-339.

as long as the preposition doesn't bear spatial meaning. In this case the clitic expresses the complement of the preposition (see (24), (25) and (26)).

- (24) pul-ra æz-esh gereft-æm
money-OM from-3S.CL got-1S
 'I got the money from him/her'
- (25) be-sh hichi næ-goft
to-3S.CL nothing not-said
 'S/he didn't say anything to him/her'
- (26) un ba-hatun mire
s/he with-2PL.CL will.go
 'S/he will go with you'

Bearing this in mind, we can return to the question whether the seemingly Ezafe-bearing spatial preposition *sære* 'on, at' classified by Samiian (1994) as Class 1 properly belongs there. The examples below are constructed with the preposition *sære* 'on (top of)' with a noun complement (27a) and with a pronominal clitic (28a), compared to the approximately synonymous C2 preposition *ru* 'on' with a noun complement (27b) and with a clitic (28b).

- (27) a. pærænde sære deræxt bud
bird on.top.of tree was
 'There was a bird on top of the tree'
- b. pærænde ru(-ye) poshtebam bud
bird on-(EZ) roof was
 'There was a bird on the roof'
- (28) a. *pærænde sære-sh bud
bird on.top.of-3S.CL was
 'There was a bird on top of it'
- b. pærænde ru-sh bud
bird on.-3S.CL was
 'There was a bird on it'

As can be seen from the ungrammaticality of (28a), the spatial preposition *sære* doesn't allow the Ground complement to be replaced by a pronominal clitic as Class 2 Ps generally do. This supports the classification suggested by Samiian.

Furthermore, *sære* behaves like the other Class 1 Ps with respect to other syntactic distinctions presented here. More specifically, *sære* doesn't allow the omission of its complement (29b), cannot be preceded by a demonstrative (29c), and, finally, doesn't appear in case positions (30).

- (29) a. gorbe pærid sære deræxt
cat jumped on.top.of tree
 'The cat jumped on the tree'

- b. *gorbe pærid sære
cat jumped on.top.of
- c. *gorbe pærid in sære deræxt
cat jumped this on.top.of tree
- (30) *bærk-ha-ye sære deræxt
leaf-PL.EZ on.top.of tree
 ‘the leaves on the top of the tree’

A bit misleading is the occurrence of *sære* with a clitic in (31).

- (31) kolah sær-esh bud
hat head-3S.CL was
 ‘S/he wore a hat’ literally ‘There was a hat on his/her head’

However, the data above do not pose a problem for analyzing *sære* as a C1 preposition, since in (31) *sær* functions as a real noun with the meaning ‘head’.¹⁰ This is a common construction in Persian used to describe the wearing of a piece of clothing on a particular body part.¹¹ The fact that there is no overt preposition will be explained in §4.3.

4.2. Syntactic distinctions between Class 2a and Class 2b prepositions

The main test to differentiate C2a Ps from C2b Ps is the Ezafe morpheme appearing on the preposition before a complement. As mentioned above, the Ezafe linker is optional with C2a Ps and obligatory with C2b Ps.

There are some other differences in the syntactic behavior of C2a as compared with C2b prepositions. C2a Ps can be preceded by a demonstrative, both when taking a Ground complement (32a) and when appearing on its own (33a). C2b Ps are ungrammatical with a preceding demonstrative, both when taking a complement (32b) and when appearing on their own (33b).¹²

¹⁰Notice, that in the glosses for this example the host of the clitic is presented as *sær* plus the 3rd person clitic *-esh*, whereas the in the previous examples, the glosses were *sære* plus the 3rd person clitic *-sh*, with an omitted initial vowel.

¹¹The same construction is found with other body parts:

- (i) kæfsh pa-sh bud
shoes foot-3S.CL was
 ‘S/he wore shoes’
- (ii) Buluz tæn-æm-e
blouse body-1S.CL-is
 ‘I’m wearing a blouse’

¹²There are, however, some exceptional C2b Ps that are acceptable when preceded by a demonstrative, as long as they don’t take an overt Ground complement.

- (32) a. ketab-ra gozæsht-æm in tu-ye quti
book-DOM put-1S this inside-EZ box
 ‘I put the book here, in the box’
 b. *ketab-ra gozæsht-æm in daxel-e quti
book-DOM put-1S this interior-EZ box
 ‘I put the book here, inside the box’
- (33) a. ketab-ra gozæsht-æm in tu
book-OM put-1S this inside
 ‘I put the book here inside’
 b. *ketab-ra gozæsht-æm in daxel
book-OM put-1S this interior
 ‘I put the book here inside’

Furthermore, when following a demonstrative, C2a Ps can take plural morphology, both when appearing on their own (34) and when taking a complement. In the second case the Ezafe linker becomes obligatory (35).

- (34) berenj rixt *(in) zir-ha
rice spilled this under-PL
 ‘The rice spilled down here’
- (35) berenj rixt *(in) zir-ha*(-ye) miz
rice spilled this under-PL-EZ table
 ‘The rice spilled here under the table’

4.3. Combining spatial prepositions from different classes

Spatial prepositions from different classes can be combined with each other. The most common case is a combination of a C1 preposition with a C2 preposition. The prepositions *be* ‘to’, *dær* ‘at’, and *æz* ‘from’ can be freely combined with any of the C2 prepositions making the location or path expressed by the preposition more specific. For SOURCE Paths the preposition *æz* is obligatory. For location, GOAL Path and VIA Path, the C1 preposition can be omitted leaving the context to disambiguate the meaning. An interesting observation is that, when a C1 preposition precedes a Class 2a P (the class with optional Ezafe), the Ezafe linker becomes obligatory before the complement, except for the case when it is preceded by the SOURCE preposition *æz*.

- (36) a. dær tu*(-ye) quti
at in-EZ box
 ‘in the box’
 b. be tu*(-ye) quti
to in-EZ box
 ‘into the box’

- c. *æz tu(-ye) quti*
from in-EZ box
 ‘out of the box’

When the context allows it, locative *dær* ‘at’ and directional *be* ‘to’ can be omitted even when not combined with a C2 P if the noun complement is a proper place name, an institution or denotes a place of activity (e.g. *Iran*, *Berlin*, *hospital*, *yard*, etc.). In such case the noun complement itself functions as a prepositional phrase.

- (37) *Mina mædræse æst*
Mina school is
 ‘Mina is at school’

- (38) *ræft-æm mæqaze*
went-1S store
 ‘I went to the store’

This is also the case with the “wear-construction” (see (31)) where the preposition *be* is omitted before the body part.

It is important to note that the C1 preposition *bær* ‘on’ can be combined only with C2 Ps expressing horizontal support, presumably because it expresses support itself and thus sets a restriction on the semantics of the prepositions it can combine with (39). Unlike *bær* the prepositions *be* ‘to’, *æz* ‘from’, and *dær* ‘at’ are less contentful, expressing GOAL Path, SOURCE Path and location, respectively.

- (39) a. *bær ru-ye miz*
on on-(EZ) table
 ‘on the table’
 b. **bær zir-e miz*
on under-EZ table
 ‘under the table’

It is less common to combine C2 Ps with other C2 Ps perhaps because of their much richer semantic structure compared to the ‘functional’ Class 1 Ps.

- (40) *Gorbe æz kenar-e posht-e sahne amæd*
cat from beside-EZ back-EZ stage came
 ‘The cat came from beside the space behind the stage’

4.4. Obligatory Ezafe for C2a Ps

As can be seen from §4.2, when the demonstrative precedes a C2a P with a complement the Ezafe linker becomes obligatory. Usually C2a Ps take Ezafe optionally when followed by a Ground complement. In §4.3 I claimed that the Ezafe is also obligatory when a Class 2a preposition follows a Class

1 preposition, with the exception of *æz* ‘from’. These are not the only cases where a C2a preposition has to make use of the Ezafe linker in order to take a complement. The same phenomenon occurs when a C2a P appears in a case position (see (41) and (42)) and when modifying an NP (43).

- (41) Nominative
- a. zir-e miz kæsif-e
under-EZ table dirty-is
 ‘It is dirty under the table’
 literally ‘The “under” of the table is dirty’
- b. *zir miz kæsif-e
under table dirty-is
 ‘It is dirty under the table’
- (42) Accusative
- a. ru-ye eshkaf-ra tæmiz kærd-æm
on-EZ cupboard-OM clean made-1S
 ‘I cleaned on the cupboard’
 literally ‘I cleaned the surface of the cupboard’
- b. ?*ru eshkaf-ra tæmiz kærd-æm
on cupboard-OM clean made-1S
 ‘I cleaned on the cupboard’
- (43) cheraq-e bala*(-ye) miz
lamp-EZ above-EZ table
 ‘the lamp above the table’

To summarize, the appearance of the Ezafe linker on a C2a preposition is in a way connected with a change in the syntactic properties of the preposition, making them appear more nominal.

4.5. Summary of the main distinctions among Persian preposition classes

In this section, I have shown the syntactic distinctions on the basis of which Persian prepositions are divided into three classes. First, the prepositions are divided into two main classes, Class 1 and Class 2. The members of these classes differ in that Class 1 Ps never take Ezafe when followed by a complement, don’t occur with a preceding demonstrative, cannot appear without a complement, don’t allow clitics, and, finally, never appear in case positions. The C2 Ps do occur on their own, do allow clitics and appear in case-positions. Further, this second class can be further subdivided in two categories, Class 2a and Class 2b prepositions. The Class 2a Ps exhibit different syntactic behavior from the C2b Ps in that they allow preceding demonstratives and, when doing so, they can optionally show plural morphology.

5. The categorial status of Class 2 prepositions

Given the syntactic behavior of Class 2 Ps, the inevitable question arises whether they aren't actually nouns, especially when one keeps in mind that they are derived from nouns, which are still used as such in Modern Persian (e.g. *posht* 'behind' or 'back', *kenar* 'beside' or 'edge', etc.). There is disagreement on this issue in the literature. Karimi and Brame (1986) and Larson and Yamakido (2005) argue that they are nouns, while Samiiian (1994) argues against this. Her arguments are based on the restrictions on C2 Ps which do not hold of real nouns. She observes that C2 Ps do not occur with quantifiers and numerals (44). Moreover, they don't allow modification, neither by adjectives nor by relative clauses (45).

(44) *hær ru-(ye) eshkaf
every on-EZ wardrobe
 'every surface of the wardrobe'

(45) *zir-e kæsif-e miz
under-EZ dirty-EZ table
 'the dirty underspace of the table'

I suggest that when Class 2 prepositions are part of directional and locative phrases they are not real nouns, although they might retain some nominal properties. Based on the extended P projection developed by Svenonius (2005-06) I argue that they are functional heads in the P projection.

5.1. PPs in subject position

In §4.4 we looked at Class 2 PPs appearing in case positions, which can be seen as an argument that they are nouns. However, since Persian doesn't have overtly expressed Nominative case, when a PP appears to be in a subject position it is not clear whether it is actually a subject. Consider the following data, where there is a clear contrast in the meaning of the lexical item *posht* meaning both 'behind' and 'back'.

- (46) a. posht-e xane særd æst
back-EZ house cold is
 'It's cold behind the house'
- b. posht-e mærd zæxmi æst
back-EZ man wounded is
 'The man's back is wounded'

With respect to the semantics in (46a) *posht* refers to the space projected from the noun *xane* 'house' and does not refer to a part of it, as it does in (46b). Furthermore, it is possible that the PP in (46a) is an adjunct rather than a subject. The lack of an overt subject can be accounted for by the fact that Persian has no overt subjects in impersonal constructions (cf. (47)).

- (47) særd æst
cold is
 ‘It is cold’

Additional support comes from the fact that coordinate PPs in what appears to be subject position do not trigger plural agreement on the verb, as exemplified in (48).

- (48) hæm jelow-ye xane hæm posht-e xane særd æst
also front-EZ house also behind-EZ house cold is
 ‘Both in front of the house and behind the house is cold’

In other words, this is a case where the C2 prepositional phrase appears to be the subject of the clause, but, in fact, it is not.

5.2. Complement of motion verbs

As mentioned in §4.3, Class 1 Ps can be omitted when their noun complement is a conventional place.

In the data set below, the noun *posht* ‘back’ is not one of those nouns, hence it has to be preceded by an overt preposition (see (49b)). Still, in (49a) it occurs on its own. Therefore *posht-e xane* ‘behind the house’ cannot be an NP. A possible solution would be that it is actually a PP and this is the reason *posht* as a preposition behaves syntactically differently from *posht* as a noun denoting the body part.

- (49) a. pærid posht-e xane
jumped back-EZ house
 ‘S/he jumped behind the house’
 b. pærid *(ru) posht-e mærd
jumped on back-EZ man
 ‘S/he jumped on the man’s back’

However, if Class 2 Ps are not viewed as nouns, a question that arises is why they can be preceded by a demonstrative. On the one hand, it appears that the demonstrative in such cases is a deictic element with the interpretation of *here* or *there*. On the other hand, the occurrence of the demonstrative can trigger plural morphology, which, according to Ghomeshi (2003) is connected to the DP layer. Still, unlike nouns, they are ungrammatical with an indefinite article, or with a definite and indefinite clitic.

5.3. Summary

In order to summarize the properties of the three prepositional classes, I give the syntactic differences with respect to which they differ in the table below. C2a prepositions are split in two columns, one for when they bear Ezafe and one when they don’t. ‘N/A’ means that in this case the Ezafe

PERSIAN PREPOSITION CLASSES

morpheme can't attach to the preposition for independent reasons so that the distinction is irrelevant.

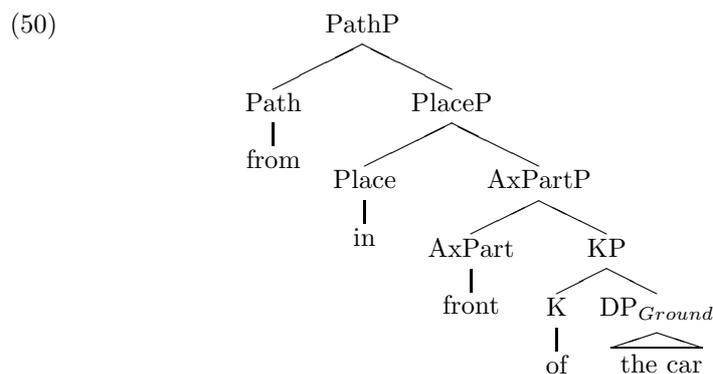
	C1	C2A		C2B	NOUNS
		no EZ	with EZ		
Ezafe	*	optional		obligatory	obligatory
Clitic	*	ok	N/A	ok	ok
Adj. modification	*	*	*	*	ok
DEM-P	*	ok	N/A	*1	ok
DEM-P-Comp	*	*	ok	*1	ok
DEM-P-Pl	*	ok	N/A	*	ok
DEM-P-Pl-Comp	*	*	ok	*	ok
NP Modification	*	*	ok	ok	ok
Agreement	*	*	*	*	ok
Quantifiers	*	*	*	*	ok

¹With exceptions

Table 3 Comparison of the syntactic properties of Persian prepositions and true nouns

Interestingly, Class 2a Ps appear to be more noun-like than Class 2b Ps, the latter being ungrammatical without Ezafe when followed by a complement, just like nouns are. I will give a possible explanation for this fact in §7.

It can be concluded that that Class 2 Ps have certain nominal properties, but are not real nouns. This is reminiscent of Svenonius' (2006) structure of the English complex PP in *from in front of the car* shown below.



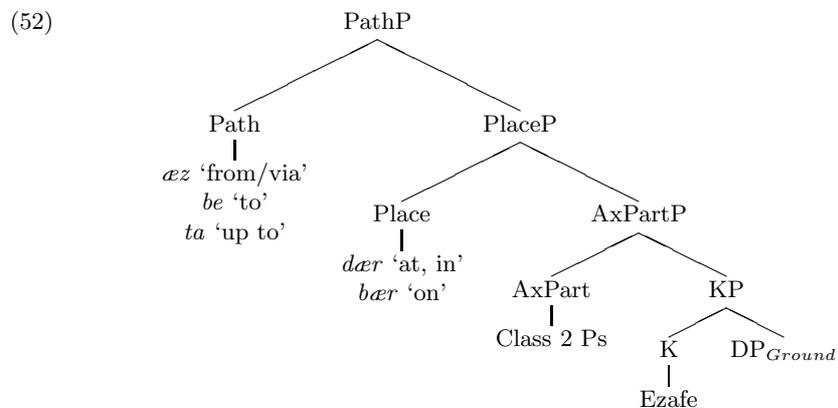
(51) from in the front of the car

The element *front* in (50) behaves differently from the same lexical item in (51) in that *front* in (51) allows adjectival modification whereas *front* in (50) doesn't. Furthermore, in (50) *front* refers to a vector space projected

from the noun while in (51) it refers to a part of the DP *car*. Recall that the same distinctions are at play in Persian.

6. The place of C1 and C2 prepositions in the extended P projection

The distinction between the two main prepositional classes in Persian fits nicely in the P structure as suggested by Svenonius (2005-06). He proposes a PP consisting of a Path head, a Place head, a head for nominal elements which he calls AxPart and a KP for case (see (50)). The same structure can be straightforwardly applied to Persian prepositional phrases.



Class 1 prepositions are hosted by the two highest functional heads. The directional Ps are Path heads expressing GOAL and SOURCE Path. The two locative C1 Ps are under the Place head selecting for a C2 preposition hosted by the AxPart head. Notice that a similar dependency exists in English *in front of*, but not **on front of* in the same way as (39a) is good but (39b) is not. Finally, assuming the hypothesis put forward in Samiian (1994) that *Ezafe* is a case-assigner, I suggest that it is under KP.

7. Feature-based analysis of Persian prepositions

In this section I'll give an explanation of the ambivalent behavior of Class 2a prepositions, further developing Samiian's (1994) feature-based account for the facts.

As already discussed in this paper, Samiian assumes that only categories specified for the $[-N]$ feature are able to assign case. Categories **not** having the feature $[-N]$ therefore cannot assign case and this is the reason they have to use the dummy case-assigner *Ezafe* as a special device for case-licensing their complements. Put more simply, if a category doesn't instantiate the $[-N]$ feature, it is expected that it will take its complements via *Ezafe*.

PERSIAN PREPOSITION CLASSES

Here, I adopt the proposal made by Samiian, namely, that Class 1 Ps are specified for $[-V, -N]$ and that Class 2b prepositions are neutralized in their $[-N]$ feature, that is, they instantiate only the feature $[-V]$. I suggest that the ambivalent Class 2a prepositions are underspecified for the $[N]$ feature. That is, they surface either as $[-V, -N]$ or as $[-V, +N]$. This means that when a C2a preposition is $[-V, -N]$ it will not need *Ezafe* to license its complement, whereas when it is $[-V, +N]$ it will take *Ezafe* before the complement. Moreover, assuming that demonstratives (and perhaps the ability to appear as NP modifiers) are available only for $[+N]$ categories, Class 2a Ps will allow them only when the preposition is $[-V, +N]$. Notice that these are exactly the cases when *Ezafe* is obligatory for the C2a Ps. Furthermore, this gives a straightforward explanation for why demonstratives are unavailable for Class 2b Ps, since they do not have the $[+N]$ feature.

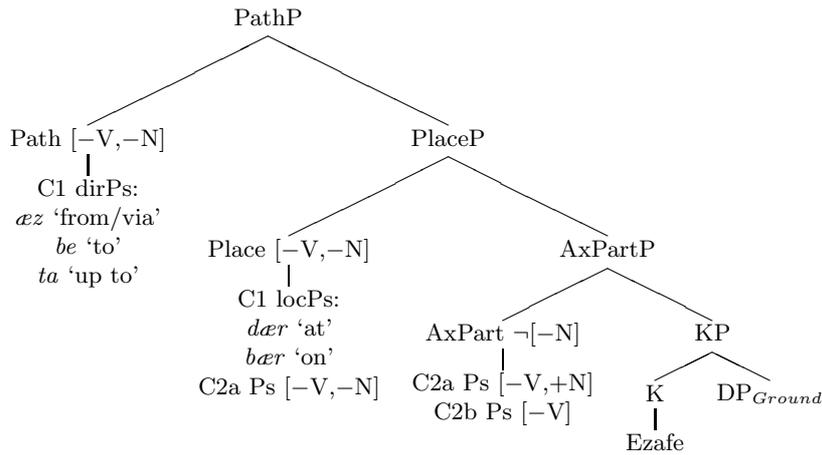
(53) presents a more perspicuous feature specification of the prepositional classes.

(53) C1 Ps: $[-V, -N]$ C2a Ps: $[-V, \pm N]$ C2b Ps: $[-V]$

Assume that in the tree structure presented in (52), the Path and the Place heads host $[-V, -N]$ categories. Assume further that the AxPart head hosts categories that do **not** have the $[-N]$ feature.

Under these assumptions, the directional Class 1 and the two locative Class 1 prepositions can still be hosted by the Path and the Place head, respectively. No modifications are necessary for the Class 2b prepositions either — they will, as before, be under the AxPart head. The crucial point is that Class 2a prepositions, being underspecified for the $[N]$ feature, will be either under Place (when $[-V, -N]$) or under AxPart (when $[-V, +N]$).

(54) Feature specification of heads in the extended spatial P projection



Now, consider the structure above more closely. It conforms to the Ezafe facts about Persian prepositions. First, as we know, Ezafe never attaches to Class 1 Ps (because they are $[-N]$, therefore able to assign case), while Class 2b Ps always have to take their complement via Ezafe (because they are neutralized for $[-N]$, therefore unable to assign case). Secondly, C2a Ps when under the Place head do not take Ezafe before their complement, but when under the AxPart head they bear a $[+N]$ feature, hence they need the Ezafe linker before the complement. An important prediction would be then that when a Class 2a P is preceded by a locative Class 1 preposition the Ezafe will become obligatory, since, in this case, the Place head will be occupied by the C1 P, and the only option available for the C2a P will be to occupy the AxPart head. The prediction is, in fact, borne out, as shown earlier in (36a), repeated below.

- (55) dær tu*(-ye) quti
 at in-EZ box
 ‘in the box’

Even more striking is the fact that it is indeed possible to combine a directional C1 preposition (i.e. a Path head) with a C2a preposition without Ezafe (i.e. a Place head), although this can be demonstrated only for one of them, namely *æz* ‘from’. This is illustrated by (36c), repeated below.

- (56) æz tu quti
 from in-EZ box
 ‘out of the box’

As mentioned before, the Ezafe is optional in (56), however, this does not refute the proposed structure, since nothing prevents the C2a P from appearing under the AxPart (hence with Ezafe) when there is a C1 P under Path.

The proposal above is able to account for all the cases when the Ezafe vowel becomes obligatory for a C2a preposition: [a] when in combination with a locative C1 P [b] when preceded by a demonstrative and [c] when modifier of an NP.

8. Conclusion

I presented an overview of Persian prepositional system and the way Persian prepositions can be classified into Class 1, Class 2a and Class 2b. I discussed the different properties the members of the three classes manifest by examining them in various syntactic structures. Drawing a parallel with the syntactic behavior of nouns, I argued against the hypothesis that Class 2 prepositions are true nouns, showing that they don’t behave as such either with respect to syntax or to semantics. I suggested that the prepositions in Class 1 and Class 2 are hosted by the Path or Place head and the AxPart

head, respectively, taking the extended P projection as proposed by Svenonius (2005-06) as a basis, and suggested that the Ezafe linking morpheme occupies the K head. Finally, I presented a feature-based hypothesis for explaining the behavior of the prepositions in Persian with respect to some phenomena usually attributed to nouns. More specifically, further developing Samiiian's (1994) claim that Class 1 Ps are $[-V, -N]$, while Class 2 Ps are only $[-V]$, I suggested that the subcategory Class 2a Ps is underspecified for $[N]$, thus explaining their ambivalent behavior and the fact that they are the only prepositions allowing a preceding demonstrative.

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MARINA PANTCHEVA

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