A Case-Based Analysis of Ezafe Construction in Central Kurdish

Rebeen Abdullah Kareem

Department of English, College of Languages, University of Sulaimani, Sulaimani, Iraq

Email: rebeen.kareem@univsul.edu.iq

Abstract:

This study addresses the nature, characteristics, and function of Ezafe morpheme in Central Kurdish. Such a morpheme is a distinctive grammatical feature of not only Central Kurdish but also all other Iranian languages. Although there have been many studies on the Ezafe Construction in Iranian languages especially Persian, very few studies have been conducted on the Ezafe in Central Kurdish. After reviewing the main studies and analyses proposed in the literature, the study offers a case-based analysis of the Ezafe construction in Central Kurdish. Drawing data examples mainly from the language under study, it becomes evident that the Ezafe morpheme occurs between nominal elements within a range of different phrases such as NP, PP, QP, and AP. Following Chomsky's 1981 case theory and the recent analysis proposed by Larson and Samiian (2018; 2020) for Persian Ezafe, the paper argues that the morpheme satisfies a licensing requirement in the following phrase, similar to '*of*' in English. A number of arguments from the nature and behavior of prepositional phrases after Ezafe, and the occurrence of Ezafe with relative and complement clauses strongly support the analysis offered in this study. The study also proposes an explanation for the reason behind the different realizations of Ezafe in Central Kurdish.

Keywords: Central Kurdish, Ezafe construction, NP modifiers and complements, case-based analysis, case theory.

الملخص:

تتناول هذه الدراسة طبيعة وخصائص ووظيفة مورفيم (الوحدة الصرفية) Ezafe في اللغة الكردية الوسطى.مثل هذا المورفيم هو سمة نحوية مميزة ليس فقط للغة الكردية الوسطى ولكن أيضًا لجميع اللغات الإيرانية الأخرى. على الرغم من وجود العديد من الدراسات حول بنية Ezafe في اللغات الإيرانية وخاصة الفارسية، إلا أن الدراسات التي أجريت على هذا مورفيم في اللغة الكردية الوسطى قليلة للغاية. بعد مراجعة الدراسات والتحليلات الرئيسية المقترحة في الأدبيات، تقدم هذه الدراسة تحليلاً قائماً على الحالة لبنية Ezafe في اللغة الكردية الوسطى. من خلال استخلاص أمثلة البيانات بشكل أساسي من اللغة قيد الدراسة، يصبح من الواضح أن مورفيم Ezafe يحدث بين العناصر الاسمية ضمن مجموعة من العبارات المختلفة مثل NP وPP وQP وAP. بناءً على نظرية الحالة التي طرحها تشومسكي عام 1981 والتحليل الأخير الذي اقترحه لارسون وساميان (2018؛ 2020) لـ Ezafe الفارسية، تزعم هذه الدراسة أن هذا المورفيم يلبي متطلبات الترخيص في العبارة التالية، على غرار "of" في اللغة الإنجليزية. إن عددًا من الحجج المستمدة من طبيعة وسلوك العبارات الحرفية بعد Ezafe، وحدوث Ezafe مع الجمل النسبية والمتممة، تدعم بقوة التحليل المقدم في هذه الدراسة. وتقترح الدراسة أيضًا تفسيرًا لسبب اختلاف تحقيق Ezafe في اللغة الكردية الوسطى.

الكلمات المفتاحية: اللغة الكردية الوسطى، بنية Ezafe، المعدلات والمكملات NP، التحليل القائم على الحالة، نظرية الحالة.

پوخته:

ئەم لێکۆڵینەوەیە باس لە سروشت و تایبەتمەندی و فەرمانی مۆرفیمی ئێزافە (ئامرازی دانەپاڵ) لە زمانی کوردیی ناوەراستدا دەکات. ئەم جۆرە مۆرفیمە تایبەتمەندییەکی ڕێزمانی جیاوازی هەیە نەک تەنها لە زمانی کوردیی ناوەراستدا بەڵکو لە هەموو زمانە ئێرانییەکاندا. هەرچەندە لێکۆڵینەوەی زۆر لەسەر بونیادی ئەم مۆرفیمە لە زمانە ئێرانیەکاندا و بە تایبەت فارسی کراوە، بەڵام لە زمانی کوردی ناوەراستدا لێکۆڵینەوەی زۆر کەمی لەسەر کراوە. دوای پێداچوونەوە بە چەند توێژینەوەیەکی سەرەکیی و چەند شیکارییەکی پێشنیار کراو لە زمانە ئێرانییەکاندا، ئەم توێژینەوەیە شیکارییەک لەسەر بنەمای تیۆری دۆخ بۆ بونیادی ئێزافە (ئامرازی دانەپاڵ) لە زمانی کوردیی ناوەراستدا پێشکەش دەکات. بە وەرگرتنی نموونەی داتا لە زمانی کوردیدا، ئەوە ڕوون دەبێتەوە کە ئەم مۆرفیمە لە نێوان دەستەواژەی ناوییدا و لە ناو مەودای فڕێزی جیاوازدا وەک NP، PP، QP و AP ڕوودەدات. بە جێبەجێکردنی تیۆری دۆخی چۆمسکی لە ساڵی ١٩٨١ و شیکارییەکانی ئەم دواییەی کە لەلایەن لارسۆن و سامییان (٢٠١٨؛ ٢٠٢٠) بۆ مۆرفیمی ئێزافەی فارسی پێشنیار کراوە، ئەم توێژینەوەیە دەگاتە ئەو دەرئەنجامەی کە ئەم مۆرفیمە مەرجێکی مۆڵەتدان لە فڕێزی دواتردا جێبەجێ دەکات، هاوشێوەی 'of' لە زمانی ئینگلیزیدا. ژمارەیەک ئارگومێنت لە سروشت و هەڵسوکەوتی دەستەواژە پێشگرەکانی دوای مۆرفیمی ئێزافە، و ڕوودانی ئێزافە لەگەڵ گرێی پەیوەندیدار و تەواوکەر بە توندی پشتگیری لەو شیکارییە دەکەن کە لەم توێژینەوەیەدا پێشکەش کراوە. هەروەها توێژینەوەکە ڕوونکردنەوەیەک بۆ هۆکاری پشت بەدیهاتنە جیاوازەکانی ئێزافە لە زمانی کوردیی ناوەراستدا پێشنیار دەکات.

کلیلە وشە: کوردیی ناوەراست، پێکهاتەی ڕێزمانیی ئێزافە (ئامرازی دانەپاڵ)، دیارخەر و تەواوکەری فڕێزی ناوی (NP)، شیکارییە لەسەر بنەمای تیۆری دۆخ، تیۆری دۆخ.

1. Introduction

One of the main distinguishing grammatical characteristics of Iranian languages is the existence of the Ezafe (also spelled in some literature as Izafe) morpheme, which forms what is called the Ezafe construction. Such a construction expresses a dependency between a head noun and modifier or complement to the right of the NP.

Such dependency between the modifier and the modified is usually expressed via an Ezafe morpheme which is represented differently across the different Iranian languages. As Holmberg and Odden (2008: 1) state, Ezafe is an 'inflection on modified categories in the noun phrase, corresponding to English *of* in some of its uses but not others.'

In Central Kurdish, as in the other Iranian languages, the Ezafe morpheme (EZ)[i] is realized within a number of phrases including nominals, adjectivals, prepositional phrases, and quantifiers.

Unlike in some other Iranian languages such as Persian, the Ezafe morpheme in Central Kurdish has two realizations as [=$\hat{\imath}$] or [=*e*] (and null in some varieties of Central Kurdish such as Garmiani variety). The following examples illustrate the basic occurrence of Ezafe, which is boldfaced in each example, in Central Kurdish.

(1)

a) xanu=**î**   ême   NP
house=EZ   1st. PL
"our house"

b) xanu=**î**   gewre   NP
house=EZ   big

"big house"

c) kuř=**e**   zirek-eke   NP
boy=EZ   smart-DEF
"The smart boy"

d) le   la=**î**   xanu-eke   PP
of side=EZ   house-DEF
"by the house"

e) alude=**î**   mešrub   AP
addicted=EZ   alcohol
"addicted to alcohol"

f) zorîne=î   xwêndkar-an   QP
majority=EZ   student-PL
"the majority of students"

The ongoing question within Iranian linguistics is related to the grammatical nature of the Ezafe morpheme, its distribution, its function, and the reasons of its occurrence. Although there have been a number of studies on Ezafe construction in other Iranian languages especially Persian, there have been very few studies on the Ezafe construction in Central Kurdish.

While different approaches such as semantic, morphological, and syntactic are pursued to analyze Ezafe, it seems all the approaches face certain problems. Yet, as will be attested in the following sections, it becomes evident that the most promising approach is syntactic. Following the recent work on Ezafe by Larson and Samiian (2018, 2020) and adopting the case theory (Chomsky 1981, and his later works), the case-based analysis of the Ezafe construction in Central Kurdish argued in the paper offers the most promising analysis.

2. The Ezafe Construction

Ezafe, which simply means addition or supplement, refers to a morpheme that occurs in Kurdish (Central Kurdish also called Sorani, Northern Kurdish also called Kurmanji, Southern Kurdish), Persian, Balochi, Zazaki, and other Iranian languages. As Windfuhr (1989) submits, Ezafe is named after the Arabic word *Idafat* which literally means 'annexation'. In terms of its origin, it is not simple to trace its origin. However, a number of researchers (such as Karimi 2007; Haider and Zwanziger 1984) maintain that the Ezafe morpheme has developed from a free-standing relative pronoun in Old Persian.

In Central Kurdish, as Mackenzie (1961) and Fattah (1997) explain, there are two realizations of the Ezafe morpheme [=î] or [=e] (and null in Garmiani variety). The latter which is represented by [=e] is named as definite Ezafe morpheme by Fattah (1997: 202), which is added to a definite noun post-modified by an adjective. If the head noun is modified by more than one adjective, each adjective except the last one is affixed with the Ezafe [=e], as exemplified in (2).

(2)

kuř=e	zîrek=e	aza(y)-eke
boy=EZ	smart=EZ	brave-DEF

'the smart brave boy'

The first realization which is represented by [=î] is named as indefinite Ezafe morpheme by Fattah (1997: 202) and is added to an indefinite head noun post-modified by an NP, an AP (as in 3 and 4 respectively), possessive phrases, or relative clauses.

(3)

kitêb=î	řêzman
book=EZ	grammar

'grammar book'

(4)

kitêb-êk=î	sewz
book-INDEF=EZ	green

'a green book'

Other distinctions are used in the literature such as NP Ezafe and AP Ezafe by Tahir (2018). However, it is important to indicate here that such distinctions are not used and the difference(s) between the two realizations are explained in the section 5.

Heads such as Nouns (N), Adjectives (A), Prepositions (P), and Quantifiers (Q) in Central Kurdish precede their complements and modifiers. In most cases, the Ezafe morpheme appears between them, being realized on the preceding head. The basic pattern of Central Kurdish Ezafe construction can be schematized as in (5):

(5)

a.   N – **EZ** NP/AP/PP/(non-)finite CP
b.   A – **EZ** NP
c.   P – **EZ** NP (for certain Ps)
d.   Q – **EZ** NP (for certain Qs)

   The examples in (6) show Ezafe morpheme occurring between the head noun and a nominal complement or modifier. In particular, the examples (6a-6c) show the Ezafe morpheme occurring between a noun and a nominal complement or modifier.

   (6d) shows Ezafe occurring between a noun and an attributive adjective. (6e) shows Ezafe between a noun and a prepositional phrase. (6f) shows that Ezafe is recursive insofar as multiple attributive adjectives trigger multiple instances of it. Finally, (6g) shows an NP being postmodified by a relative clause.

(6)   Nouns followed by postmodifiers or complements

a) xanu=î   šuše   (N=EZ NP)
house=EZ   glass
"glass house"

b) šeqam=î   Salim   (N=EZ NP)
street=EZ   Salim
"Salim Street"

c) ruxandin=î   xanu   (N=EZ NP)
destruction=EZ   house
"house destruction/destruction of house"

d) xanu=î   biçuk   (N=EZ AP)
house=EZ   small
"small house"

e) diwar=î   nêwan   maĺ-eke-an   (N=EZ PP)
wall=EZ   between   house-DEF-PL
"the wall between the houses"

f) kitêb=î   gewre=î   sur   (N=EZ AP=EZ AP)
book=EZ   big=EZ   red
"big red book"

g) kitêb-eke=î ke   dwênê   kṛ-ît   (N=EZ CP)
book-DEF-EZ   that   yesterday   buy.PST-2SG
"the book that you bought yesterday"

The following examples in (7) show the occurrence of the Ezafe morpheme in an adjective phrase (AP) attaching to the head A and followed by the nominal (NP) complement.

(7) Adjectives complemented by nominals (NP)

a) ašiq=î   pare   (A=EZ NP)
in love=EZ   money
"enamoured with money"

b) nîgeran=î   taqikirdinewe   (A=EZ NP)
worried=EZ   test
"worried about test"

The morpheme under discussion can also occur between certain prepositions (P) and their complements, as shown in (8).
(8) Prepositions complemented by NPs

a) beyn=î   min   u   to   (P=EZ NP)
between=EZ   me   and   you
"Between you and me"

b) le la=î   derga-eke   (P=EZ NP)
of side=EZ   door-DEF
"by the door"

Ezafe can also occur between certain quantifiers (Qs) and their restriction phrase, as shown in (9).

(9) Quantifiers complemented by their restriction phrases

a) tewaw=î   xwêndkar-an   (Q=EZ NP)
all=EZ   student
t-PL
"all students"

b) zorine=î   xwêndkar-an
majority=EZ   student-PL

"The majority of students"

3. The Morphological Status of the Ezafe Morpheme

It is often difficult to establish whether a morpheme is an affix or a clitic. Spencer (1991) identifies both of them as bound morphemes which cannot occur on their own but need a host to attach to. There are a number of studies (such as Zwicky and Pullum, 1983; Klavans, 1985; Anderson 2005; to name a few) with regard to the differences between clitics and affixes. The exact nature and characteristics of clitics are difficult to point out. This is because clitics seem to be at crossroads of morphology and syntax. In some respects, they seem to behave like affixes since they are attached to other words; while in certain other respects, they behave as independent words. Still, some general characteristics of clitics can distinguish them from affixes.

Accordingly, on the basis of distributional, prosodic and morphological criteria used by (Zwicky and Pullum 1983) to distinguish between affixes and clitics, the current study establishes that the Ezafe morpheme in Central Kurdish should be considered as an enclitic. In the first place, clitics have a fixed position in the clause whereas affixes do not impose such demands with regard to their position. For example, most languages have second position clitics, often called Wackernagel position (this criterion might not be applicable to Ezafe here). Secondly, as Zwicky and Pullum (1983: 503) explain, 'clitics can exhibit a low degree of selection with respect to their hosts, while affixes exhibit a high degree of selection with respect to their stems'. In other words, clitics do not care about the grammatical category of the word they attach to. What they usually adhere to is the position of the constituent they attach to. Affixes, on the other hand, usually select a particular category to attach to, and do not care in which syntactic position that category is . Thus, based on this criterion, the Ezafe morpheme can be considered as enclitic since it can attach to nouns, adjectives, prepositions, or even quantifiers, as shown in the examples (6-9) above.

Another distinction is that clitics attach to material already containing clitics or inflectional suffixes. Affixes, though can attach to other affixes, cannot attach to constituents containing clitics. Hence, since the Ezafe morpheme can attach to plural suffix marker, definite or indefinite suffixes[ii] and cannot be followed by any affix, it is reasonable to consider Ezafe morpheme as an enclitic, as exemplified in (10).

(10)

a) kitêb-eke=î Azad
book-DEF=EZ   Azad
"Azad's book"

b) kitêb-eke-an=î   Azad
book-DEF=EZ   Azad
"Azad's books"

In addition, while affixes exhibit morpho-phonological and semantic idiosyncrasies, clitics have regularity in their morpho-phonological realization and behavior. The meaning of the Ezafe morpheme plus the phrase to which it attaches to is predictable from their individual meanings and doesn't create any irregularity in meaning which is often the case with affixes.

Pointing out some problems with the criteria introduced by Zwicky and Pullum (1983), Miller (1992) proposes some refinements. The haplology criterion presented by Miller does not work with regard to the Ezafe morpheme in Central Kurdish. However, his coordination criterion will be favored here to provide conclusive evidence that the Ezafe morpheme is clitic rather than affix. According to this criterion, if an item cannot be repeated on each conjunct in a coordinated structure, then such item is a postlexical clitic.

In other words, clitics can have a wide scope over a coordination of hosts (Miller 1992: 385). In (11) below, the Ezafe morpheme refers to the coordinated constituent rather than the word *dayk* 'mother'.

(11)

[xušk	u	daiyk]=î	Azad	geišt-in
[sister	and	mother]=EZ	Azad	arrive.PST-3PL

'Azad's sister and mother have arrived.'

Thus, the Ezafe morpheme in question here [=î], which is attached phonologically to the word *daiyk* 'mother', has scope over the coordinated NP (xušk u daiyk).

As pointed out by Tahir (2018), an interesting characteristic of the Ezafe morpheme in Central Kurdish which supports its status as clitic is related to its occurrence as a free element. The Ezafe morpheme can sometimes occur independently, especially in elliptical constructions, as shown below.

(12) *Question*

kitêb=î kê	de-kř-ît?
book=EZ who	IND-buy-PRS-2SG?

"whose book are you going to buy?

Answer

hî[iii]	Azad
EZ	Azad

"Azad's"

It can thus be established that the Ezafe morpheme is a clitic rather than an affix. And, the significance of such a conclusion is that while affixes attach to morphological constituents, clitics attach to syntactic ones. Anderson (1993) thus calls clitics 'phrasal affixes', an expression which levels the behavior of both kinds of linguistic material but also points to the main difference between them, namely the relevance of syntax for clitics. In other words, phrasal affixes, like clitics, combine syntactically with phrases while appearing as an affix on the head of the constituents they subcategorize syntactically. However, unlike most clitics, they exhibit 'lexical' phonology. In this paper, I propose a clitic analysis of Ezafe morpheme in Central Kurdish without resorting to use the term 'phrasal affix'.

4. A Critical Review of Some Previous Studies

Although there are a number of studies on Persian Ezafe (such as Samiian 1993, 1994; Ghomeshi 1997; Moenzadeh 2001; Larson and Yamakido 2005; Samvelian 2006, 2007; Parsafar 2010; Kahnemuipour 2014, 2016; Larson and Samiian, 2018, 2020, among others), there have been very few studies on Kurdish (especially the Central Kurdish dialect). There have been a few number of works on Ezafe in other dialects of Kurdish such as Kurmanji, Zazaki, and Hawrami (such as Holmberg and Odden 2004, 2008; Atlamaz 2016; Strunk 2003, 2005; Toosarvandani and Van Urk 2012). To the best of my knowledge Karimi (2007) and Tahir (2018) are the only two detailed and theoretical works on Ezafe in Central Kurdish.
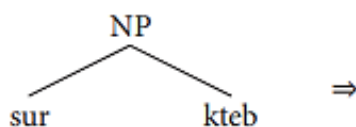
While a complete review of all these works is beyond the scope of this paper, a detailed account and a critical review of the most prominent works on Ezafe will be given in this section. Since this study adopts the case-based analysis of the Ezafe construction, it is better to first review other works that have adopted different approaches. Once the drawbacks and shortfalls of these works are examined, arguments for a case-based analysis will be presented.

To begin with, Karimi (2007) is the first theoretical work on Ezafe construction in Central Kurdish. He argues for the existence of the 'Predication Phrase' in the structure of DP which he calls nP by analogy to *v*P in clausal domain. The head of the nP is the Ezafe morpheme. Following (Bowers, 1993), he essentially suggests that Ezafe represents a semantic predication relation between its two flanking expressions. In other words, he analyzes Ezafe as a predicate-forming operator similar to *v* in clausal domain. As explained by Larson and Samiian (2020: 178), Karimi (2007) offers the two-step derivation in (13b) – (13c) for the simple example in (13a).
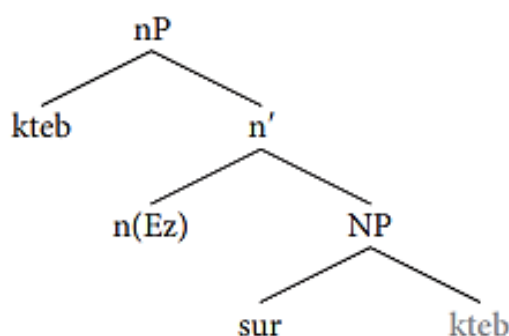
(13)

a) kitêb=î   sur
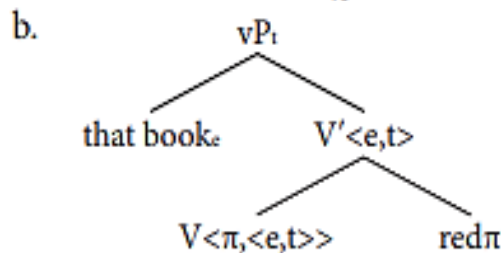book=EZ   red
"(a) red book"

b)

c)

The derivation is that *sur* "red" initially merges with *kitêb* "book" as an adjunct and the latter eventually raises to the specifier (Spec) of a combining n/Ez head so that "predication should somehow be codified syntactically in the DP" (Karimi, 2007:2164). As pointed out by Larson and Samiian (2020: 179), it is clear that Karimi sees a close analogy between structures (13c) and the following structure (14) proposed by Bowers (1993).

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(14)

a. Mary considers [$_{vP}$ that book red]
b.

However, such an assimilation seems highly problematic. In the first place, for Bowers (1993), *sur* and *kitêb* both "denote property expressions of type π, whose combination would occur, not by predication, but rather by property conjunction" (Larson and Samiian, 2020: 179). Thus, it seems that there is a basic misunderstanding of examples like (13a), particularly of the semantic relation holding between its two constituents. The relation is not predication based on either a classical formal semantic analysis or on one countenancing first-order properties as in Bowers (1993). As discussed by Larson and Samiian (2020: 179), on a classic semantic analysis (such as Larson and Segal 1995; Heim and Kratzer 1998), *red* and *book* in (15a) are taken to be predicates and their combination as co-predication – predication of the same object (x) (15b). On Bowers' property-theoretic analysis (see also Bowers 2001), they are conjoined properties (15c).

(15)

a) [$_{NP}$ red book]
b) λx[**red'**(x) & **book'**(x)]
c) **red' ∩ book'**   (taken from Larson and Samiian (2020: 179).

Therefore, it can be concluded that it is not possible to analyze Ezafe on a semantic basis and as predicate-forming operator simply because there can be no parallel between predication structures like (15b) and what is occurring in modification.

There are also some problematic examples for Karimi (2007)'s account and other studies which basically analyze Ezafe in terms of predication (for example, den Dikken and Singhapreecha 2004; Kahnemuyipour 2006). Such examples are mainly related to the differences between attributive and predicative adjectives, as pointed out by Larson and Samiian (2020: 180). Whereas many adjectives are predicative (as in (16a), some are clearly not (as in 17a). Similarly, if an adjective is combined with a noun, it is either equivalent to co-predication (as in 16c) or is not (as in 17c):

(16)

a) John is elderly.
b) John is a friend.
c) John is a longstanding friend. = John is a friend who is elderly.

(17)

a) #John is longstanding.
b) John is a friend.
c) John is a longstanding friend. ≠ #John is a friend who is longstanding.

As pointed out by Larson and Samiian (2020: 180), if, as Karimi (2007) suggests, Ezafe is associated with predicative relations, it would strictly occur with predicative adjectives and not with non-predicative ones. As is the case in Persian, there seems to be no difference between predicative and non-predicative adjective-noun combinations in Central Kurdish with respect to occurrence with Ezafe. In other words, Ezafe morpheme must be present if either type of adjective is used, as exemplified below in (18-21).

(18)

Aram	hawřê(y)-êk=î	be	temen-e
Aram	friend-INDEF=EZ	with	age-BE.3SG

“Aram is an elderly friend.”   (co-predicational)

(19)

Aram	hawřê(y)-êk=î	dêrîn-e
Aram	friend-INDEF=EZ	longstanding-BE.3SG

“Aram is a longstanding friend.”   (non-copredicational)

(20)

Aram	yarizan-êk=î	zor	bash-e
Aram	player-INDEF=EZ	very	good-BE.3SG

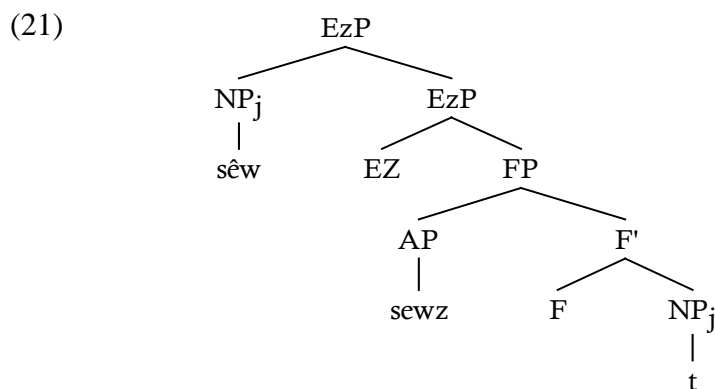“Aram is a very good player.”   (non-copredicational)

Therefore, it is evident that analyzing Ezafe morpheme in terms of predicative semantics seems mistaken both theoretically and empirically.

Following Kahnemuyipour (2014) who describes Persian Ezafe as a 'marker of modification', Tahir (2018) proposes an analysis of Ezafe in Central Kurdish in which he distinguishes between two types of Ezafe, namely AP Ezafe and NP Ezafe. Tahir (2018) submits that the NP Ezafe serves to assign Case to a following DP. However, the reason that Tahir (2018) does not completely adopt the analysis of Ezafe as a case assignor is related to the AP Ezafe, which he believes that it "shows agreement in definiteness with the definite article" (Tahir, 2018: 49).
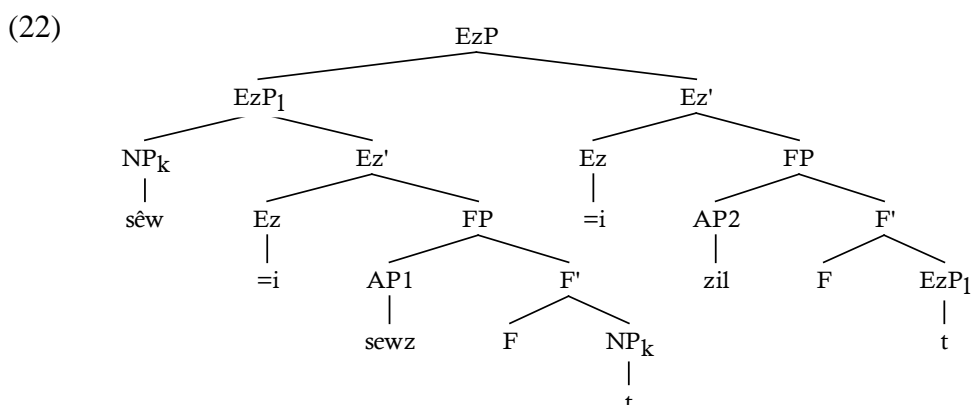
Essentially, both studies of Kahnemuyipour (2014) and Tahir (2018) adopt the proposal of Cinque (2010) according to which there is a universal, right-descending structure for DPs wherein determiners, demonstratives, and numerals occur higher and modifiers such as APs occur lower and closer to the NP head. Hence, since both studies adopt somewhat a similar analysis, only Tahir (2018)'s, which is specifically on the Ezafe construction in Central Kurdish, is reviewed below.

Tahir (2018: 49) proposes two types of movement depending on which type of Ezafe is realized. The 'AP Ezafe', a term used in his study, is derived by a "roll-up movement", whereas the NP Ezafe

is derived by a "non-roll-up movement". With regard to the AP Ezafe, which specifically refers to an Ezafe followed by an adjective, he submits, following Cinque (1994, 2005, 2010), that postnominal modifiers are "non-projecting phrasal elements merging with a null functional category in its Spec above NP" (Tahir, 2018: 56). In order to derive the nominal phrase, he proposes that the noun merges first with a null functional category (F) followed by the merger of the adjective in the Spec of FP. Then, the Ezafe is merged with the FP and the Spec of Ezafe Phrase will serve to accommodate the landing site of the NP after it is moved/raised. Accordingly, based on his analysis, Ezafe is a functional category and is present to trigger NP movement and is subject to showing agreement features, drawing on a number of studies which consider the Ezafe to show agreement features (Kahnemuipour 2014, 2016; Atlamaz, 2016; Franco *et al*, 2015). And, to derive the right surface order, the NP moves to the Spec of the EzP which is triggered by "movement-triggering feature on Ezafe" (Tahir, 2018: 57), as shown in the diagram below.

(21)

If there are more than one adjective modifiers of the head noun, the derivation recurs, which means that the new adjective merges in the Spec of a higher functional head above EzP before a second category of Ezafe merges further up, whose specifier of the second Ezafe serves a landing site of the raised constituents. And, the NP is further raised in "a roll-up fashion" which picks up all the constituents on its way upwards and lands in the Spec of the highest Ezafe projection, as shown below.
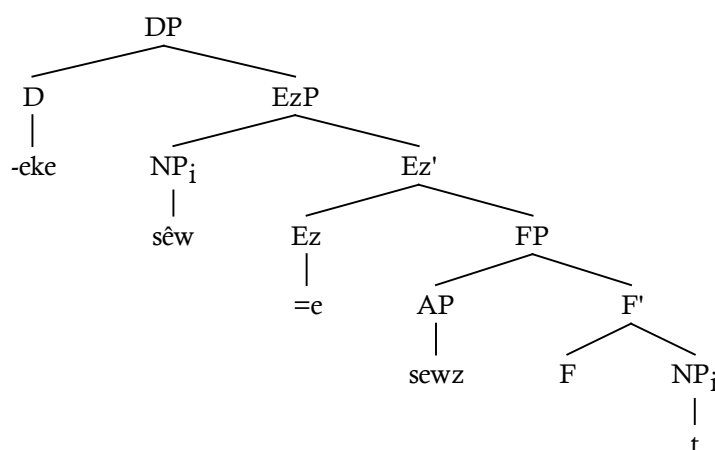
(22)

As mentioned above, one of the main reasons that Tahir (2018) does not consider the Ezafe morpheme to be a case-assignor is related to the belief that the AP Ezafe agrees in definiteness with the definite article *-eke*. Thus, if the nominal in (22) is definite, the definite article *-eke* merges with

the derived nominal after the end of the roll-up movement, projecting a DP that dominates the Ezafe phrase. Since the Ezafe has a definiteness feature, it enters in an Agree relation with the D and is subsequently spelled out as -*e*, as exemplified below and structurally diagrammed in (24).
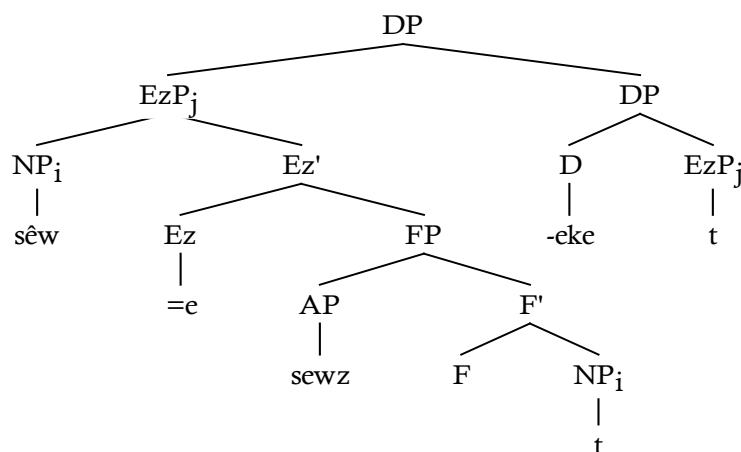
(23)

  sêw=e   sewz-eke
Apple=EZ   green-DEF
"the green apple"

(24)

In order to derive the right surface order, Tahir (2018) assumes that the DP in Central Kurdish requires its specifier to host an NP or a category containing it. He also assumes that D has EPP feature which attracts the Ezafe projection to its specifier. Thus, the pied-piping movement continues in that D attracts the EzP, which contains the NP, to its specifier, as shown in (26).

(25)

It should be noted, though, as Tahir (2018: 63) assumes, when there is no agreement between D and the Ezafe morpheme, only the NP to the exclusion of the EzP moves to the specifier of the DP and "the roll-up movement pattern would no longer be a requisite".

While Tahir (2018) proposes a pied-pipping movement analysis for the derivation of the AP Ezafe, a different account, namely, a non-roll-up movement, is proposed for the NP Ezafe. He believes that
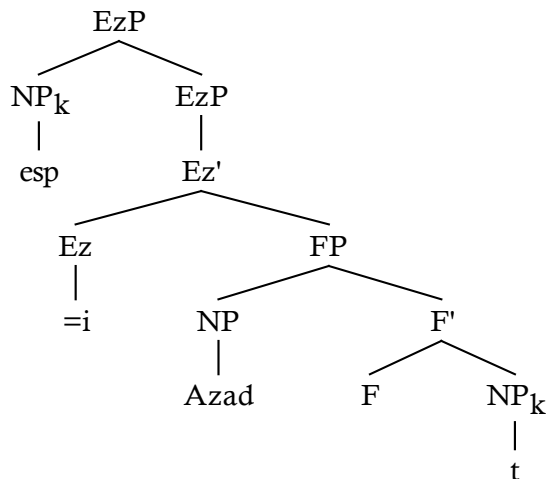
NP Ezafe is different from the AP Ezafe in that the former "always precedes a DP to which it assigns Case, and unlike AP Ezafe, (it) never exhibits agreement with D in definiteness" Tahir (2018: 66).

Thus, unlike AP Ezafe derivation, the NP Ezafe is followed by a full DP with D realized by the definite article. An example such as that of (26) is derived with the DP assumed to merge with a functional category (F) above the NP *esp* 'horse' in the same way as the AP Ezafe. Then, the Ezafe phrase is merged above the FP projection, before the NP *esp* 'horse' raises to the Spec of the EzP, as shown in (27).

(26)

esp=î   Azad
horse=EZ   Azad
"Azad's horse"

(27)

As explained by Tahir (2018: 67), the nominal phrase in (27) is already definite due to the fact that it is a possessive construction. Still, the referent can be further specified by the addition of the definite article *-eke* "as a case of double definiteness", as shown in (28).

(28)

esp-eke=î   Azad
horse-DEF=EZ   Azad
"Azad's horse"

Along the lines of (Heim 1982; Enç 1991; Lyons 1999), he assumes that the definite article *-eke* in Central Kurdish marks both uniqueness and specificity which are subsumed under definiteness. Hence, due to having an EPP feature, when D realized by *-eke* merges above Ezafe, movement of the NP *esp* 'horse' continues which finally lands at the Spec of the DP, as shown below.

(29)

Different from the roll-up movement assumed for the derivation of AP Ezafe, no roll-up movement is proposed in the derivation of NP Ezafe. As shown in (29) above, there is only the movement of the lowest NP, which first moves up to the Spec EzP and then to the Spec DP. The reason why the EzP does not raise to the Spec DP as is the case with the AP Ezafe, according to Tahir (2008: 68), is "most plausibly due to lack of agreement the Ezafe shows in definiteness with D".

That is, the derivation of NP Ezafe is non-roll-up movement and the roll-up movement of EzP to the Spec DP is established only when the Ezafe agrees with the D, which is the case in AP Ezafe. It should also be noted that Tahir (2018) also submits that the NP Ezafe assigns Case to the DP in its c-command domain, a point that will be referred to in section 5.

Although Tahir's analysis of the NP Ezafe as a case assignor is promising, his two different analyses of the Ezafe morpheme seem to face problems when a wide range of examples or modifiers are considered. As is known, roll-up movement as proposed by Cinque (2010) and adopted by Kahnemuyipour (2014) and Tahir (2018) is consistently phrasal movement. Accordingly, the roll-up phrasal movement cannot account for examples of Ezafe occurring between heads and complements. As pointed out by Larson and Samiian (2020: 183) for Persian Ezafe, it is possible to find numerous examples of Ezafe morpheme in Central Kurdish in which the Ezafe comes between the head and its complement.

The nouns in (30) have relational semantics ($\lambda y\lambda x[R(y)(x)]$) and what follows them stands in a complement relation to them, providing argument to the relation, just as in the English gloss.

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(30)

a) řuxandin=î　　　　　　hikumet

toppling=EZ　　　　government

"toppling of the government"

b) xwardinewe=î　　　　　aw

drinking=EZ　　　　water

"drinking of water"

　　The same is true for adjective heads. The Ezafe can attach to certain adjective heads, which can have relation semantics, and the adjective stands in a complement relation to what follows it. The examples in (31) clearly indicate that the Ezafe marks complements of adjectives.

(31)

a)　ašiq=î　　　　　Aram

enamored=EZ Aram

"enamored with Aram"/in love with Aram"

b)　šêt=î　　　　　pare

crazy=EZ　　　　money

"crazy about money"

　　There are also certain prepositions (exemplified in (8) repeated as (32) below) in Central Kurdish which can have relational semantics and what comes after them can be considered as complements, as is manifest in the English gloss.

(32)

a) beyn=î　　　　min　u　　to

between=EZ　me　and　you

"Between you and me"

b) le　la=î　　　　derga-eke

of side=EZ　　door-DEF

"by the door"

　　Ezafe can also occur between certain quantifier heads and their restriction phrase, which functions as the argument or complement of the quantifier, as shown in (9) repeated below as (33).

(33) tewaw=î　　　　xwêndkar-an

all=EZ　　　　student-PL

"all students"

　　It is thus evident that such cases are problematic examples for the analysis proposed by Tahir (2018). In other words, the phrasal roll-up movement proposed cannot derive the desired order because the relation is consistently head-complement. The two different analyses, roll-up phrasal

movement for AP Ezafe and non-roll-up phrasal movement for NP Ezafe, proposed by Tahir (2018), would rather require moving a head to a phrasal position, which is obviously not allowed under current theory. Hence, the Cinque-style roll-up analysis, proposed by Tahir (2018), and the assimilation of Ezafe as an instance of modification proposed by Kahnemuyipour (2014), faces certain challenges that are difficult to address.

Studying Persian Ezafe, Samvelian (2007, 2008), following Miller (1992) who proposes a morphological treatment of 'phrasal affixes', argues that Persian Ezafe is best considered as an affix attaching to nominal heads and nominal intermediate projections before the head combines with its single direct complement, and marking them as expecting a modifier or an NP complement. Viewed as such, the Ezafe construction is a special instance of the head-marked pattern of morphological marking of grammatical relations (Nichols, 1986) in that a nominal head and its intermediate projections are morphologically marked to receive a dependent. In particular, on the basis of some diagnostic criteria suggested by Zwicky and Pullum (1983), Zwicky (1987) and Miller (1992), Samvellian (2007: 607) argues that Ezafe morpheme in Persian is best regarded as "an affix whose function is to indicate dependency relations between the head noun, its modifiers and the possessor NP".

Samvellian (2007: 607) adopts a lexicalist approach in line with Zwicky (1987) and Miller (1992), "according to which phrasal affixes are realized by the same device as word-level inflectional affixes". Thus, her analysis is a morphological one in which Ezafe is considered to be an affix that attaches to nominal elements (nouns, adjectives, or some prepositions) and marks a 'dependency relation' of either modification, possession, or complementation with the following phrase. Her analysis is couched within the Head-Driven Phrase Structure Grammar (HPSG) (Pollard and Sag 1994; Ginzburg and Sag 2000), and depends largely on the concept of Edge Features as worked out by Miller (1992), Lapointe (1990, 1991), and Tseng (2003). Edge features, according to Samvellian (2007: 634), can handle the mismatch between the morphological scope of phrasal suffixes, which are of a single word, and their syntactic and semantic scope, which are of a phrase, by offering a treatment which is split between the two levels. In other words, morphological rules in the lexicon handle affixation whereas unary syntactic rules handle the interpretation of affixation. The two levels are linked by information encoded in Edge feature, which propagates from peripheral daughter to the mother in all branches of syntactic structures. To illustrate this point, Samvellian (2007: 635) provides an analysis shown below in (38) for a Persian example in (37).

(34)

mojgân=e	az	rimel	sangin=e	Maryam
eyelid.PL-EZ	of	mascara	heavy-EZ	Maryam

"Maryam's mascara-laden eyelids" (Persian)

(35)

As explained by Samvellian (2007), the arrows in the structure above indicate the Ezafe suffixation, which is added twice, once on *mojgân* 'eyelid', which is the head of the NP, and once on *sangin* 'heavy', which is the rightmost element within the AP that precedes the possessor NP[iv]. She also adds another feature [DEP], which stands for 'dependency', that accompanies [EZ] and takes scope at the level where [EZ] attaches; that is, at the level of N or NP. The dependency feature [DEP] requires that the constituent it attaches to or marks must be followed by a noun, an AP, a PP, or an NP. Hence, as is apparent in the structure in (38), the [DEP] feature on the N *mojgân* is satisfied by the occurrence of AP *az rimel sangin*, the [DEP] feature on the NP *mojgân az rimel sangin* is satisfied by the occurrence of *Maryam*.

One of the problems in Samvelian's (2007; 2008) account is related to the fact that her main argument for considering Ezafe morpheme as a 'phrasal affix' is the haplology criterion (Miller 1992) without much consideration for the coordination criterion as evidence for distinguishing clitics from affixes. Although the haplology criterion might seem to apply to Persian Ezafe, it is problematic when applied to the Ezafe morpheme in Central Kurdish. As argued in section (3), the morphological status of the Ezafe morpheme is clitic rather than. Moreover, whereas the Ezafe morpheme in Persian cannot follow the indefinite article, it can simply attach to the indefinite article '*êk*' in Central Kurdish. Still, though there is no specific problem in accepting the term 'phrasal affix' in the sense that Samvelian uses, the current study does not treat enclitics as affixes and give morphological account of their behavior. As Anderson (2013) notes, a phrasal affix analysis of a morpheme X can be separated from a clitic analysis of X by resorting to the selectivity criterion. If a morpheme exhibits selectivity in the stems it attaches, it can be analyzed as a phrasal affix.

Another significant problem with the morphological account of Ezafe of Samvelian, as pointed out by Larson and Samiian (2020), is that it does not provide explanation for its occurrence. Ezafe is simply proposed to be a nominal morpheme whose effect is to require a following AP, PP, or NP. As will be explained below, there will be other phrases or clauses, specifically relative clauses, that follow the Ezafe morpheme. Still, even if they are added to the list of [DEP] feature that Samvelian (2007) proposes, there will be no explanation to their different behavior. Nonetheless, Samvelian's

account has advantages over other accounts in that it does not relate Ezafe with a specific semantic concept such as predication or modification, seen previously with the accounts proposed by Karimi (2007) and by Tahir (2018).

As pointed out by Larson and Samiian (2020), Ezafe morpheme can occur not only before reduced relative clauses in Persian, it can also occur after them. The same is true for finite relative clauses in Kurmanji dialect of Kurdish. If Samvelian (2007)'s phrasal affix analysis suggests that Ezafe is a nominal morphology in that it combines with a lexical word or a NP, passing down its right edge, Ezafe must then be realized on a nominal stem. And, this suggests, as Larson and Samiian (2020) argue, the generalization that Ezafe morpheme occurs between nominal elements.

Another problematic case for Samvelian's analysis, and even for other accounts of Ezafe, is related to the postnominal PP modifiers of the Ezafe. As explained by Samiian (1983, 1994) and Larson and Samiian (2018, 2020) for Persian, it seems that Central Kurdish prepositions can be divided into three different sets based on their complements; prepositions that forbid Ezafe before their complements (Set 1), prepositions that allow Ezafe before their complements (Set 2), and prepositions that require Ezafe before their complements (Set 3). These three different sets are exemplified below.

(36) **Set 1 (Prepositions that <u>forbid</u> Ezafe)**

a) bo   (*=î)   Aram
to   (=EZ) Aram
"to Aram"

b) le   (*=î)   Aram
from   (=EZ) Aram
"from Aram"

(37)   **Set 2 (Prepositions that <u>allow</u> Ezafe)**

a) pêš   (=î)   xanu-eke
before (=EZ) house-DEF
"in front of the house/the front of the house"
b) zhêr   (=î)   mêz-eke
under   (=EZ) table-DEF
"under the table"

(38) **Set 3 (Prepositions that <u>require</u> Ezafe)**

a) beyn   *(=î)   min   u   to
between   =EZ   me   and   you
"between you and me"

b) la   *(=î)   derga-eke
by   =EZ   door-DEF
"by the door"

Following Samiian (1994)'s labels for Persian prepositions, Set 1 can be labelled as 'true prepositions', whereas the other two sets can be labelled as 'nominal prepositions', which can be used like any other nominals. It is assumed that they are grammaticalized to be used as prepositions simply because the set of true prepositions in Central Kurdish is very limited.

Like relative clauses, prepositional phrases (PPs) can function as modifiers of nominals with a NP. As shown in the examples of (39), the PPs headed by the different sets of Ps function as postmodifiers of the nominal.

(39)

a) kobunewe   (*=î)   legeĺ   Aram   (Set 1 Preposition)
meeting   =EZ   with   Aram
"meeting with Aram"

b) dîwar=î   berdem   bîna-eke   (Set 2 Preposition)
wall=EZ   in front of   building-DEF
"wall in front of the building"

c) pêĺaw=î   la=î   derga-eke   (Set 3 Preposition)
shoe=EZ   by=EZ   door-DEF
"the shoe by the door"

The examples in (39b) and (39c) indicate that not only Ezafe can occur inside PP on the head P (as shown above in (37) and (38)) but can also occur outside PP on the modified nominal. Accordingly, it shows that different sets of prepositions behave differently with regard to the occurrence inside and outside of the PP which they head. Such different patterns pose serious problems for Samvellian (2007)'s account because her account only allows nominals to receive Ezafe followed by a NP, AP, PP without offering any mechanism as to why certain PPs require a preceding Ezafe and some other PPs do not allow Ezafe. In order to provide a convincing answer to a problem like that, Larson and Samiian (2020) offer another generalization which captures the reason that Ezafe does not appear simply to signal the occurrence of a following phrase of a certain category, as argued in Samvelian (2007, 2008). The occurrence of Ezafe is for the sake of satisfying a need in the phrase in which it occurs. As Larson and Samiian (2020: 196) put it, "Ezafe satisfies a licensing requirement in the following phrase". Hence, there needs to be a theory and an analysis which offers a better understanding of why certain phrases co-occur with an Ezafe, what common characteristics can be found with these types of phrases, and what the function of Ezafe is. The answers to such questions can be found in the analysis offered in this paper, which is offered in the next section.

5. Analysis of Ezafe as a Case-Assignor

Ezafe morpheme in Central Kurdish can be seen as a parallel to the preposition *le* 'of'. As is evident in the following, the examples in (a) show the occurrence of Ezafe; whereas the examples in (b) show the use of preposition *le* 'of' in place of the Ezafe morpheme without much difference in meaning. Just like the Ezafe morpheme, it seems the preposition *le* contributes very little meaning to the examples and that its content largely depends on the context. They are both present mainly for grammatical reasons. Without their presence, the examples would become ungrammatical.

(40)

a) řaport=**î**   wezaret=î   xwêndin=î   baĺa
report=**EZ**   ministry=EZ   education=EZ   high
"report of/from the ministry of higher education"

b) řaport   **le**   wezaret=î   xwêndin=î   baĺa
report **of**   ministry=EZ   education=EZ   high
"report of/from the ministry of higher education"

(41)

a) grup-êk=**î**   xwêndkar-an
group-INDEF=**EZ**   student-PL
"a group of students"

b) grup-êk   **le**   xwêndkar-an
group-INDEF **of**   student-PL
"a group of students"

(42)

a) nigeran=**î**   zhyan
worried=**EZ**   life
"worried about life"

b) nigeran   **le**   zhyan
worried   **of**   life
"worried about life"

(43)

a)   zorine=**î**   xwêndkar-an
majority=**EZ**   student-PL
"the majority of students"

b)   zorine **le**   xwêndkar-an
majority   **of**   student-PL

"the majority of students"

As noted by Karimi and Brame (1986, 2012), Samiian (1983, 1994), Larson and Samiian (2020) for Persian Ezafe, English shows the same general parallelism between Ezafe and the preposition *le* to that extent that English can often gloss Central Kurdish Ezafe naturally with '*of*', as was the case with almost all the examples presented in this paper. Again, the semantic input by '*of*' is very little and the presence of the preposition is mainly for grammatical purposes. Chomsky (1981) submits that '*of*' is present in the English examples as shown in the glosses of (40-43) so as to satisfy a case licensing requirement on noun phrases; that is, [+N] elements. Basically, nominal items require case; whereas nominal elements do not assign or check case. Thus, when two nominals X and Y are adjacent (44a), a case assignor such as '*of*' is required to assign case to the rightward Y (44b). As Samiian (1994) suggests for Persian, Central Kurdish preposition *le* 'of' can be analyzed in the same way (44c).

(44)

NON-CASE-ASSIGNING	CASE-ASSIGNING	CASE-REQUIRING
a. X [+N] ⟶		Y [+N]
b. X [+N] ⇏	[PP **of** ⟹	Y [+N]] **English "of"**
c. X [+N] ⇏	[PP **le** ⟹	Y [+N]] **Kurdish "le"**

Accordingly, it can be argued that Ezafe is responsible for the assignment of Case to the NP/DP it c-commands. Such an argument is compatible with Kayne (1994)'s proposal which analyzes *of* in English in a similar way. In fact, Holmberg and Odden (2004, 2008) offer a similar account of Ezafe as case-assignor in Hawrami. Adopting Chomsky's (1995, 2000, 2001) mechanism of case assignment, structural Case is considered as a feature valued on the case-assigning category but unvalued on the case-assignee. Moreover, case feature is considered to be uninterpretable as it has no semantic content on any of the category, thus, it can be considered to be a purely syntactic phenomenon.

Samiian (1994) and Larson and Samiian (2020) propose the same analysis for the Persian Ezafe. It is thus possible to extend the same picture to the Central Kurdish Ezafe, suggesting that Ezafe is basically a case-assigning element that is merged into the first nominal X and provides case assignment for the second element (Y), as shown schematically in (45). It is worth mentioning that Larson and Yamakido (2008) propose a somewhat similar analysis in which they take the Persian Ezafe as a clitic version of the preposition *az* 'of' heading its own phrase (EzP) and cliticizing onto the preceding nominal stem.

(45)

NON-CASE-ASSIGNING	CASE-ASSIGNING	CASE-REQUIRING
a. X [+N] - EZ ⟹		Y [+N] **Kurdish Ezafe**
b. X [+N] - EZ	[EzP – Ez ⟹	Y [+N]] **Kurdish Ezafe**

Based on this analysis, Ezafe can be seen as a case marker which is added to the complements of [+N] categories, including nouns, adjectives, and prepositions. A very good argument, as first observed by Samiian (1994), supporting this analysis is related to the fact that the use of Ezafe can be noticeably extended beyond modification. As mentioned above, there can be many contexts in which the use of Ezafe in Central Kurdish (and other Ezafe languages) can be simply paralleled by the usage of the English genitive case-marking preposition '*of*', including complements of N (as in 46), complements of A (47), and certain partitive constructions (48).

(46) xwardin=î   gošt
    eating=EZ   meat
    "eating of meat"

(47) nigeran=î   taqîkirdnewe
    worried=EZ   test
    "worried about test"

(48) tewaw=î   xwêndkar-an
    all=EZ   student-PL
    "all (of the) students"

As evident from the English glosses, the function of the preposition '*of*' in English is to case-mark the following nouns. The same analysis is suggested for Ezafe, although what comes after it includes more than just nouns. A very good piece of evidence, as suggested by (Samiian 1994; Larson and Samiian 2018; Larson and Samiian, 2020), is related to the behavior of prepositions, which seems to be basically the same across the Iranian languages. As explained in section (4), Central Kurdish prepositions can be classified into three sets. Set 1 does not allow Ezafe, Set 2 allows Ezafe, whereas Set 3 requires Ezafe. Set 1 can also be named as 'true prepositions' and the other two sets can be named as 'nominal prepositions'. Thus, such distinctions related to the behavior of prepositions indicate that Set 1 are actually true function words corresponding to English prepositions, whereas the other two sets are really noun-like elements. In fact, it can be argued that Set 2 and Set 3 are actually nouns that can behave or function as prepositions in certain structures. They can be used as nouns performing the grammatical functions like any other true nouns in the language. As shown in (49a and 49b), examples of prepositions such as 'pêš' and 'la' can simply take the definite article '*eke*' and form a noun phrase.

(49)

a) pêš-eke=î   xrap   bu-e
front-DEF=EZ bad   Be.PST-Be.PRS
"Its front has been damaged."
b) la-(y)-eke=î xrap   bu-e.
side-DEF=i   bad   Be.PST-Be.PRS
"One side of it has been damaged."

Under the analysis presented in this paper, it is the case that when PPs in Central Kurdish are headed by either Set 2 or Set 3 prepositions, the PP is obviously nominal in character and hence

requires the presence of Ezafe before it. However, when the PP is headed by Set 1 prepositions, the PP is clearly not nominal, refusing Ezafe to be present. In other words, if Ezafe occurs before nominal [+N] elements, it follows that the different classification of prepositions is set based on 'nominality' in P, as can be shown below.

Set 1 prepositions must be non-nominal	[-N]
Set 2 prepositions must be optionally nominal	[±N]
Set 3 prepositions must be nominal	[+N]

In line with Jackendoff (1973, 1977) and Svenonius (2003) who draw parallelism between VP and PP structure, Larson and Samiian (2018, 2020) analyze the Ezafe distribution with PPs by drawing a *v*P/pP parallelism in the domain of nominalization. Larson and Samiian (2020: 214-215) consider the structures of the boldfaced phrases in the following English examples to propose an analysis of different sets of Persian prepositions.

(50)

a) [$_{VP}$ V NP]   John will **destroy the evidence**   *of*-forbidden
b) i. [$_{NP}$ V-*ing* NP]   John's **destroying the evidence**   *of*-optional
ii. [$_{NP}$ V-*ing* of NP]   John's **destroying of the evidence**
c) [$_{NP}$ V *of* NP]   John's **destruction of the evidence**   *of*-required

In (50a), the boldfaced phrase '*destroy the evidence*' is internally and externally verbal. It is internally verbal in that it shows an accusative object and it is externally verbal in that it combines with a modal '*will*'. The boldfaced phrase in (50b.i) '*destroying the evidence*' is a verbal gerund which is internally verbal in showing accusative object, but it is externally nominal in that it combines with a possessor. The boldfaced phrase in (50b.ii) '*destroying of the evidence*' is a nominal gerund which is internally nominal because it requires *of* before the object and is externally nominal because it combines with a possessor. And, the final example of (50c) shows that the boldfaced phrase '*destruction of the evidence*' is both internally and externally nominal. Larson and Samiian (2018; 2020) argue that Persian prepositions can be analyzed in a parallel way. Adopting the same analysis for prepositions in Central Kurdish means that Set 1 prepositions, which can also be called 'true prepositions', are parallel to true verbs, as shown in (51a). It also means that Set 2 prepositions are parallel to gerunds, as shown in (51b); whereas Set 3 can be considered as parallel to derived nominals, as shown in (51c).

(51)

a) [$_{PP}$ P NP]   kobunewe   [$_{PP}$ **legeĺ** (*=î) **Aram**]   *EZ*-forbidden
'meeting with Aram'
b) i. [$_{NP}$ P NP]   dar=î [$_{NP}$ **berdem**   **xanu-eke**]   *EZ*-optional
ii. [$_{NP}$ P =EZ NP]   dar=î [$_{NP}$ **berdem=î xanu-eke**]
                        'the tree in front of the house'
c) [$_{NP}$ P =EZ NP]   pêĺaw=î [$_{NP}$ **la=î**   **derga-eke**]   *EZ*-required
'the shoe by the door'

The boldfaced phrase in (51a) '*legeĺ Aram*' is internally and externally prepositional. It is internally prepositional in that it shows an accusative object (as mentioned above and referred to again in this section, the object can be morphologically marked with oblique case, particularly in Pishdar variety of Central Kurdish), and it is externally prepositional in that it does not show or allow Ezafe. The boldfaced phrase in (51b.i) '*berdem xanu-eke*' is internally prepositional in that it shows an accusative object, but it is externally nominal in showing Ezafe before the phrase it heads. The boldfaced phrase in (51b.ii) is both internally and externally nominal. It is internally nominal because it requires Ezafe before the object and is externally nominal in that it shows Ezafe before the phrase it heads. Lastly, the boldfaced phrase (51c) is both internally and externally nominal. As mentioned above, it is quite reasonable to assume that the Set 2 and Set 3 prepositions are actually nominals and are grammaticalized to function as prepositions. Still, even if they are taken to be categorically prepositions and are analyzed as nominals, such an analysis explains why they require Ezafe before their complements and why the phrases they head function nominally. This is especially true for Set 3 prepositions, and to a large extent true for Set 2 of prepositions. For instance, the preposition used in (51c) can function like any other nominal. The example in (52a) shows that PPs headed by the Set 3 prepositions can combine with demonstratives. The example in (52b) reveals that Set 3 prepositions can take the definite article and be pluralized, whereas the example in (52c) shows a preposition modified by an adjective. The example in (52d) shows a Set 1 preposition taking a PP headed by a Set 3 preposition as its object.

(52)

a) **em**   la-**(y)e**=î   derga-eke
this   side-DEM=EZ   door-DEF
"This side of the door"

b) la-**(e)k(e)-an**=î   derga-eke
side-DEF-PL=EZ   door-DEF

"The sides of the door"
c) la   **pîs**-eke=î   derga-eke
side   dirty-DEF=EZ   door-DEF
"The dirty side of the door"
d) **bo**   la=î   derga-eke
to   side=EZ   door-DEF
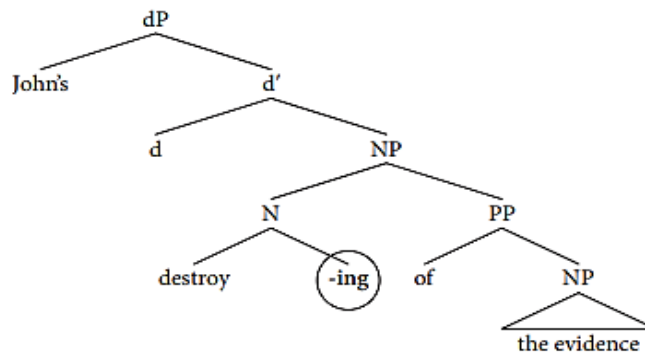"to (directional) the side/near of the door"

With regard to Set 2 prepositions, following Larson and Samiian (2018) account of Persian prepositions, it is possible to adopt Jackendoff's (1977) analysis of nominal vs. verbal behavior in gerunds. As Jackendoff submits, nominal gerunds are basically formed when a nominalizing morpheme -*ing* attaches to a lexical verb, which, in turn, is converted to an N and its phrasal projection is determined as NP. In verbal gerunds, however, the nominal morpheme does not attach to the lexical verb but attaches to the larger VP, which is then converted to an NP but its internal verbal structure will remain intact. Larson and Samiian (2020: 216) update Jackendoff's proposal for gerunds slightly,

as shown in (53a) and (53b) below. It is worth noting that the positioning of *-ing* above *v*P in (53b) allows v to assign accusative object to the complement.
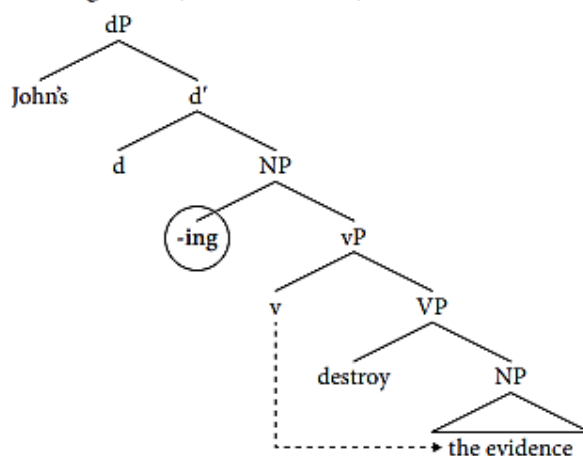
(53)

a)

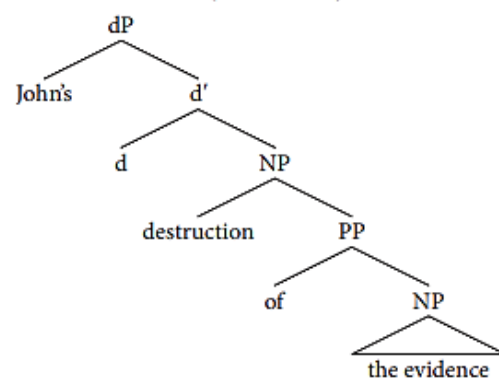Nominal gerund (nominalized V)

b)

Verbal gerund (nominalized vP)

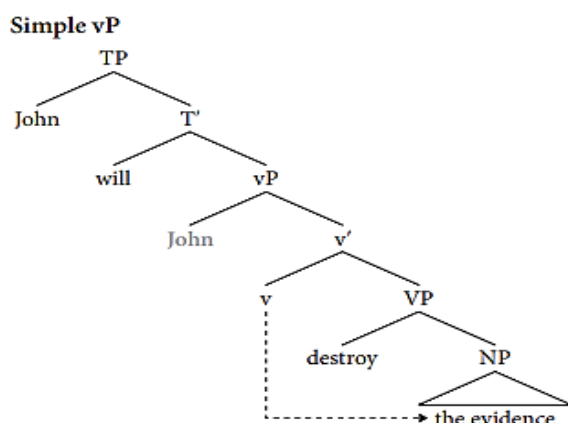Structures for the corresponding derived nominal and simple *v*P are given in (54a) and (54b), respectively.
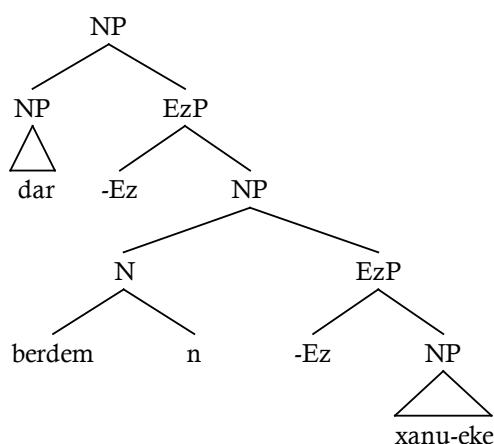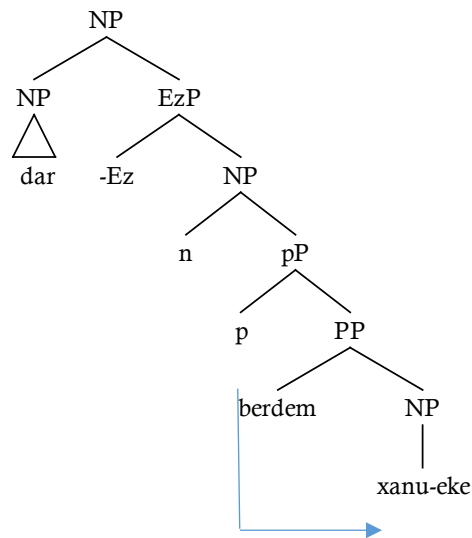
(54)

a)

Derived nominal (deverbal N)

b)

Following Larson and Samiian (2018, 2020), who propose a very similar analysis of Persian prepositions, it is reasonable to extend the same analysis to Set 2 prepositions in Central Kurdish. In particular, if Set 2 preposition occurs with a following Ezafe, it is assumed that a nominalizing morpheme √n attaches to the P, which in turn converts it to N and its projection is determined as NP, as shown structurally in (55a). This form can be taken to be the corresponding prepositional counterpart of a nominal gerund in containing a nominalized head (54a). However, when the Set 2 prepositions occur without a following Ezafe, a nominalizing morpheme attaches to the larger pP, which in turn converts it to an NP but its internal prepositional structure remains intact, as shown in (55b). This form can be taken to be the corresponding prepositional counterpart of a verbal gerund in containing a nominalized phrase, as shown previously in (54b). Just as seen above in the structure of verbal gerund, the position of √n above pP allows p to assign accusative case to the complement. Corresponding structures related to Set 3 and Set 1 prepositions are given in (56a) and (56b), respectively.

(55)

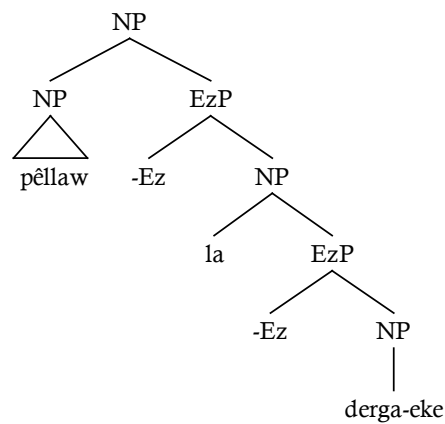a)   Set Two Prepositions (Nominalized P)

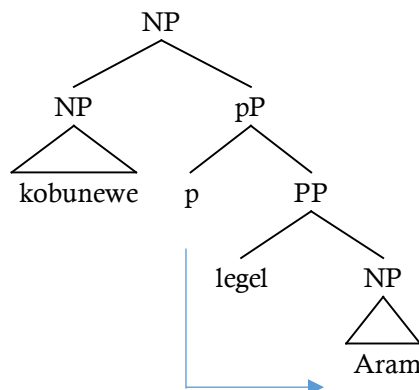b) Set Two Prepositions (Nominalized pP)

(56)

a) Set Three (de-prepositional N)
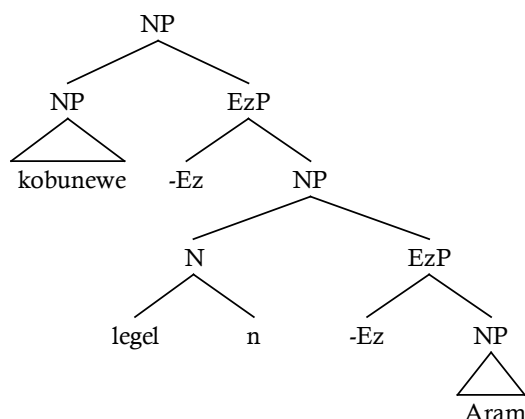

b) Set One Prepositions (pure pP)

As the structures show, the parallelism between the structures of PPs and verbal nominalizations is very close. Finally, with regard to the Set 1 prepositions, it is quite possible to analyze them under
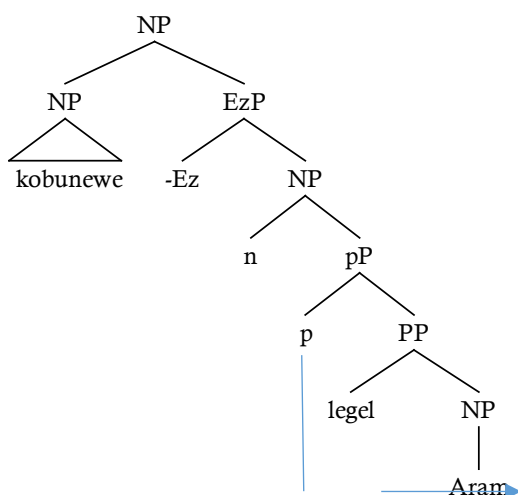
Jackendoff's scopal analysis. In other words, although it is quite expectable for lexical constraints to exert themselves when nominalization applies to the lexical item, no such constrains can be expected when applied to the phrasal projection. Hence, due to their lexical semantics, Set 1 prepositions reject nominalization. However, when they project a pP phrase, they can readily accept nominalization as lexical constraints cannot be applied. Accordingly, whereas (57a) is excluded, (57b) is readily accepted.

(57)
a) Set 1 Prepositions (Nominalized P)

b) Set 1 Prepositions (nominalized pP)

To sum up, the case-based analysis offered in this paper can easily predict the different behaviors of PP in Central Kurdish. In particular, the occurrence of Ezafe within PPs is related directly to the 'nominality' of the head P. And, the presence of Ezafe morpheme externally to PP is related to the 'nominality' of the phrase that P projects. With regard to Set 3 prepositions, the head and the phrase are both N. The other Set 2 and Set 1 prepositions can be integrated into this account by extending Jackendoff's (1977) proposal regarding the structure of PP and scopal nominalization to the Central Kurdish prepositional system, along the lines of argument and analysis offered by Larson and Samiian (2018, 2020) for Persian.

5.1 Ezafe Morpheme and Postmodifier Clauses

As noted in section (4), in Central Kurdish, Ezafe morpheme is required before finite relative clauses that modify nominals, as shown below.

(58) ew   xwêndkar-e=î   ke   dwênê   hat.
   That student-DEM=EZ   that   yesterday   come.PST.3SG
   "That student who came yesterday"

In addition to relative clauses, Ezafe morpheme is also required before finite complement clauses, as exemplified in (59a), and non-finite complement clauses, as in (59b).

(59)
a) ew   hîwa-(y)e=î   [ke   serok   zu   bi-řwa-t]
that   hope-DEM=EZ   that   boss   soon   SUBJ-go.3SG
"the hope that the boss will soon go."
b) hiwa=î   [zu   řoyštin=î   serok]
hope=EZ   soon   go.INF=EZ   boss
"The hope for the early going of the boss."

Thus, it becomes evident that whereas Central Kurdish is fundamentally a verb-final language in that complements precede verbs, relative and complement clauses follow verbs when they complement the verb. Other types of clauses that must follow the verb include finite control clauses (as exemplified in (60a)) and finite perception verb complement clauses (exemplified as (61a)). However, the non-finite versions of control clauses and perception verb complement clauses precede the verb, as exemplified in (60b) and (61b).

(60)

a) *Aram   Mîna-î   řazî   kird*
Aram   Mina-3SG   convince   do.PST.3SG
ke   pêwist-e   bi-řwat.
That   necessary-Be.PRS   SUBJ-go.PRS.3SG
"Aram convinced Mina that he/she must go."

b) Aram   Mîna-î   [be   řoyštin]   řazi   kird
Aram   Mina-3SG   to   go.INF   convince   do.PST.3SG
"Aram convinced Mina to leave."

(61)

a) Aram   bînî-î   ke   Mina   řoišt.
Aram   see.PST-3SG   that   Mina   go.PST.3SG
"Aram saw that Mina left"

b) Aram   [řoištin=î   Mina]-î   bînî
Aram   [go.INF=EZ   Mina]-3SG   see.PST.3SG

"Aram saw Mina leave/Aram saw Mina's leaving"

An important point to notice here is that, just as in relative clauses and complement clauses, non-finite perception verb complement clauses require Ezafe. In other words, such types of clauses occupy the typical nominal positions.

Following Samiian (1994), the unmarked sequence of Ezafe-marked constituents within nominals can be as in (62a) and exemplified as in (62b).

(62)

a) [N =**EZ**   AP=**EZ**   PP=**(EZ) NP**]

b) [[N xanu] =î   [AP biçuk] =î   [pp řu=(î)   qîble] =î   Aram
   house=EZ   small=EZ   front=EZ direction=EZ   Aram

"Aram's small house which faces the direction of Qibla"

Similar to the verb in the VP domain, the genitive occurs at the right edge in the NP domain. This means that the pre-genitive domain includes nominal complements and modifiers of N, which all bear Ezafe. In contrast, the phrases and clauses that are in the post-genitive domain do not require Ezafe. For example, the noun '*beĺên*' with a non-finite propositional complement '*hatin bo Koye*' requires Ezafe, as shown in (63a). However, when a genitive is added, this genitive must occur at the right edge, not post-nominally, as shown in the grammatical example of (63b) and the ungrammaticality of (63c). This means that the non-finite propositional complement '*hatin bo Koye*' must come before the genitive just like other [+N] complements under (62a) above.

(63)

a) beĺên=î   [hatin   bo   Koye]
promise=EZ   come.INF   to   Koye
"the promise of coming to Koye"

b) beĺên=î   [hatin   bo   Koye]=î   [NP Aram]
promise=EZ   come.INF   to   Koye=EZ   Aram
"Aram's promise of coming to Koye"

c) * beĺên=î   [NP Aram]=î   [hatin   bo   Koye]
promise=EZ   Aram=EZ   come.INF   to   Koye
"Aram's promise of coming to Koye"

It is interesting to see that even if we change the non-finite propositional complement into a finite one, we get the same results. In other words, the noun '*beĺên*' with a finite propositional complement '*ke dêt bo Koye*' requires Ezafe, as shown in (64a). Just as was the case with the non-finite complement, when a genitive is added, this genitive must occur at the right edge, not post-nominally, as shown in the grammatical example of (64b) and the ungrammaticality of (64c). (64d) shows that if we add a goal PP complement, which bears no Ezafe, it must be added outside the genitive.

(64)

a) ew   belên-e=î   [ke   dêt   bo   Koye]
that   promise-DEM=EZ   that   come.PRS.3SG   to   Koye
"the promise that he/she will come to Koye"

b) belên=î   Aram [ke   dêt   bo   Koye]
promise=EZ Aram that   come.PRS.3SG   to   Koye
"Aram's promise that he will come to Koye"

c) *ew   belên-e=î   [ke dêt   bo   Koye]=î   [NP Aram]
that   promise-DEM=EZ   that come.PRS.3SG   to   Koye
"Aram's promise that he will come to Koye"

d) belên=î   Aram   [bo Mina]   [ke   dêt   bo   Koye]
promise=EZ Aram   to   Mina   that   come.PRS.3SG   to   Koye
"Aram's promise to Mina that he will come to Koye"

The same pattern can be observed with regard to relative clauses. As noted above, non-finite relative clauses require Ezafe, as shown in (65a). If a genitive is added, it must occur at the right edge of the noun phrase, as in (65b), not post-nominally (65c). If a PP modifier *be bê Azad* "without Azad" is added, which bears no Ezafe, it must occur outside the Ezafe domain, as shown in (65d).

(65)

a) wêne=î   [bilawkirawe   le   rojname]
photo=EZ   published   in   newspaper
"a photo published in newspaper"

b) wêne=î   [bilawkirawe   ]=î   [NPAram]
photo=EZ   published   =EZ   Aram
"Aram's published photo"

c) *wêne=î   [NP Aram]=î   [bilawkirawe   le   rojname]
photo=EZ   Aram=EZ   published   in   newspaper
"Aram's photo published in newspaper."

d) wêne=î   [bilawkirawe   ]=î   [NPAram] [be bê Azad]
photo=EZ   published   =EZ   Aram   without Azad
"Aram's published photo without Azad"

The different behaviors of these various types of clauses with regard to Ezafe cannot be accounted for in the accounts offered for in the literature, such as accounts offered by Tahir (2018) and Karimi (2007). For instance, although these clauses function differently (some of them are complements and some others are modifiers), in certain cases they behave similarly in terms of Ezafe. In particular, whereas semantically relative clauses can be considered modifiers and complement clauses cannot be considered as predicates or modifiers, no such differences can be indicated when it comes to their behavior with Ezafe. Hence, the predicate analysis offered by Karimi (2007) and the modifier analysis

of Tahir (2018) and Kahnemuyipour (2014) cannot offer predictions about such differences among these postmodifier clauses. By contrast, the case-based analysis offered here can offer clear prediction with regard to the two different dependency-types, namely, modification vs. complementation. Considering Ezafe as a nominal morphology (a nominal clitic) that functions to satisfy a case-marking requirement on the following phrase, the presence of such a morpheme is predicted accordingly. As we have seen in the above examples, the prediction is that Ezafe occurs before a clause if such a clause has nominal status. In turn, it follows that relative and complement clauses in Central Kurdish are nominal. And, as clauses are considered to be CPs within the generative framework, it follows that the complementizer C is also nominal in Central Kurdish. In particular, Central Kurdish has a [+N] relative pronoun *ke* which occurs in finite and non-finite relative clauses, and it has a [+N] complementizer *ke* which occurs in finite and non-finite complement clauses.

5.2 Ezafe Morpheme and Adjectival Modifiers

It was thus far argued that the Ezafe morpheme establishes a dependency relation between a nominal and a following phrase or clause. The Ezafe morpheme assigns case to the following nominal phrase. Case is realized on the nominal especially in Pishdar variety of Central Kurdish, as seen in (66) below.

(66)

esp=î   Azad-î
horse=EZ   Azad-CASE
"Azad's horse"

It was also argued that when the following modifier is a relative clause, the Ezafe morpheme is still taken to be a case-assignor because relative clauses, finite or reduced relative clauses, are established to be nominal in nature. The same was true with regard to complement clauses. It should be noted that there is no possibility of the morphological realization of such a case assignment as only nominals can take case inflections.

Another seemingly problematic case for the analysis of the Ezafe morpheme as a case assignor is related to adjectival modifiers. In fact, Tahir (2018) submits and admits that Ezafe assigns case to the following DP but it seems that the only problem for him to consider and analyze Ezafe as a case assignor is when the following modifier is an AP. And, this is one of the arguments that Tahir uses against the analysis of Ezafe as a case assignor. However, this seemingly problematic case can be resolved, following (Larson 2022), if one conceptual situation in DP is explored. Larson (2022) follows Pesetsky and Torrego (2007) who propose an extension to admit the full space of possibilities for [±interpretable] and [±valued] features instead of traditional grammars which consider case as real or primary on the nominal head, but derivative or secondary on its modifiers. One of the two conceptual situations that Larson explores is related to situations in which adjectives in a language behave non-concordially; that is, adjectives behave like nouns with respect to case. Applying such a conception on Persian Ezafe, he submits that Ezafe governs/assigns case with adjectives, just as it does with nouns. In addition, contrary to Karimi and Brame (1986; 2012), who consider Persian adjectives to be nouns, Larson (2022) argues that adjectives behave like nouns with respect to Ezafe

and can never be like nouns. One simple argument in favor of treating adjectives not as nouns is related to the fact that only nouns are permitted in argument positions.

Hence, this conception can also be applied to Central Kurdish Ezafe. In other words, adjectives in Central Kurdish can be argued to be governed by Ezafe just as nouns are governed by it. An example such as (6d) repeated here as (67) can instantiate such a conception.

(67)

xanu=î   biçuk
house=EZ   small
"small house"

   Since the adjective *biçuk* 'small' behaves like nouns in Central Kurdish (for example, the adjective can take definite and indefinite article), the Ezafe morpheme can still be analyzed as a case assignor. However, due to the fact that only nominals can receive case morphology, no such realization is possible. It is worth noting here that, unlike Tahir (2018) who labels it as AP Ezafe, there is no need to call the morpheme different names as it is argued that Ezafe has only one function whether it is followed by nouns, adjectives, certain prepositions, or even clauses.

    Lastly, the second realization of the Ezafe morpheme in Central Kurdish, which is =e, occurs when the Ezafe morpheme agrees with the definite article. In other words, when the nominal phrase is definite and the modifier element is an adjective, the Ezafe morpheme is realized as =e, as exemplified in (68a). However, as seen in most of the examples in this study, when Ezafe is followed by a noun or a proper name, it is always realized as =î regardless of whether the nominal construction is definite or indefinite, as shown in (68b) and (68c). Thus, in (68b), although the noun is suffixed with the definite article -eke and followed by a proper name *Aram*, the Ezafe morpheme is still realized as =î. Likewise, in (68c), the modifier noun *xwêndkar* is definite through the definite article -eke and the modified noun *kitêb* is regarded definite as it is possessum in a possessive construction, the Ezafe morpheme is still realized as =î.

(68)

a) xwênkar=**e**   zîrek-**eke**
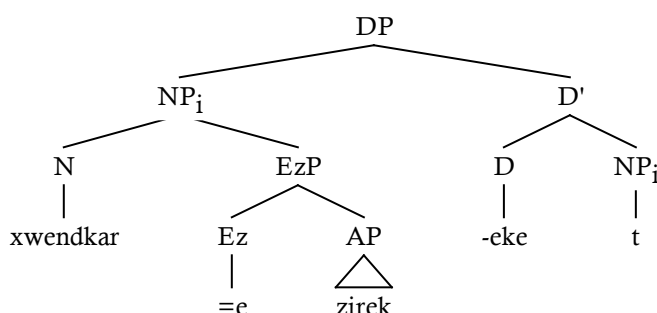student=EZ   smart-DEF
"the smart student"

b) kitêb-eke=î Aram
book-DEF=EZ   Aram
"Aram's book"

c) kitêb=î   xwêndkar-eke
book=EZ   student-DEF
"The student's book"

   As Tahir (2018: 76-77) argues, such change in the realization of Ezafe (as shown in (68a)) should not be considered as vowel harmony, as he provides a number of arguments that Ezafe "bears
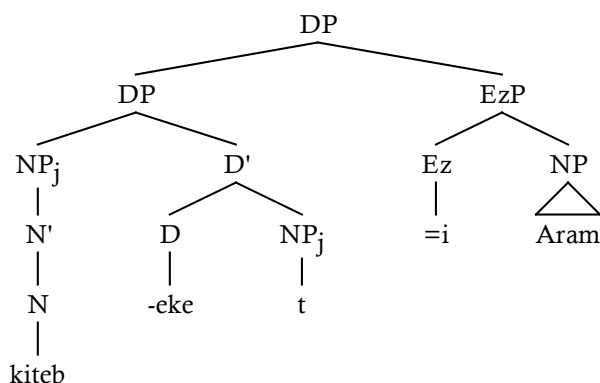
definiteness feature and establishes a syntactic agreement with D". However, the question that remains is related to the fact that the Ezafe morpheme is =e when the modifier is an adjective and the nominal is definite, as seen above in (68a), but the Ezafe morpheme is realized as =î in all other cases. The answer to this question lies in the process of the definiteness and the addition of the definite article *-eke* to the nominal phrase. If the nominal phrase is made definite via the suffixation of the definite article *-eke* and when such nominal phrase is modified by an adjective, the definite article is cliticized onto the adjective in the surface order, as seen in (68a). The definite article enters the derivation by merging with the nominal head after such a nominal head is postmodified by an adjective phrase. This is why it has scope over and c-commands the Ezafe morpheme. In terms of the derivation and the surface order, as assumed by (Tahir 2018), the DP in Central Kurdish requires its specifier to host an NP or a category containing it. Following Chomsky (2000, 2001) that Agree is part of the operation Move, and assuming that the phi-features on D bear an EPP feature, Agree between D and the NP containing the Ezafe projection would be accompanied by movement of the NP to Spec DP due the presence of the EPP feature on D. Thus, the definite article, represented as D, which holds EPP feature, attracts the NP containing the Ezafe projection to its specifier, as shown in the tree diagram below. And, as a result of agreement in definiteness between the Ezafe and the definite article, the Ezafe morpheme =î changes into =e.

(69)

It should be noted, though, that no such movement and agreement between the Ezafe morpheme and the definite article occur in other cases in which, for instance, the modifier phrase is a noun phrase. This is because the D attracts the NP to its specifier before the whole DP is being modified or complemented by any phrase or clause with the help of the Ezafe morpheme. Thus, an example such as that of (68b) can be schematically represented as follows.

(70)

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Finally, it is important to notice that indefinite *-êk* article cannot behave in the same way as the definite article *-eke*. In other words, the indefinite article is cliticized directly onto the head noun and cannot be separated from it by an adjective modifier, as shown in (71).

(71)

xwênkar-êk=î   zîrek
student-INDEF=EZ   smart
"a smart student"

6. Conclusions

A syntactic analysis based on the case theory offers the most suitable analysis for the distribution of the Ezafe morpheme than almost any other analysis. The Ezafe morpheme mainly occurs between nominal elements within different phrases such as NP, PP, QP, or AP. Not only can the morpheme be followed by phrases, it can also be followed by a number of finite and non-finite clauses such as relative or complement clauses. The main argument throughout this study is that the Ezafe morpheme attaches to a nominal head and precedes any phrase or clause if they are nominal in character. Hence, the function of Ezafe is to satisfy a licensing requirement in the following phrase, and, if the phrase is specifically nominal, the realization is manifest in terms of a case inflection, especially in certain varieties of Central Kurdish. The case-marking analysis argued for in this paper also explains the nature and behavior of prepositional phrases, relative and complement clauses with regard to the occurrence of Ezafe morpheme. Lastly, the main reason behind the different realizations of the morpheme under study is accounted for in terms of agreement between Ezafe and the definite article *-eke*.

Endnotes

[i] Although there are other inflectional morphemes within the structure of DP that are clitics, For ease and relevance of discussion, only the Ezafe morpheme is represented with the clitic sign (=). Moreover, the focus of this paper is on the Sulaimani variety of Central Kurdish. Thus, it is worth mentioning here that in the Pishdar variety of the Central Kurdish following the Ezafe morpheme the nominal is inflected for a case. Thus, the nominal in (1d) *xanu-eke* is overtly realized for case and is pronounced as *xanu-eke-î*. This point is referred to and analyzed in section 5 of this paper.

[ii] For more discussion on the status of such markers in Central Kurdish, see Tahir (2018).

[iii] As pointed out by Tahir (2018), Central Kurdish does not allow onsetless syllables; that is, every syllable must start with a consonant. Since the Ezafe morpheme is a vowel, it cannot start a syllable. Thus, an epenthetic consonant (either /h/ or a glottal stop) is provided to satisfy the phonological rules of the language.

[iv] It should be noted that the structure could be represented within a generative framework and the phrase could include a DP projection in possessive. However, since modifying the structure to a DP projection does not change the basic analysis of Ezafe proposed by Samvelian, it is presented exactly as was given by Samvelian (2007: 635).

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