Western Iranian *Ezāfé*:
A Comparative Syntactic Analysis

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Introduction

Cross-linguistic studies of related constructions often play an important role in theoretical linguistics, and are essential to a deeper understanding of linguistic phenomena. While we may be able to learn much from a single language, special insight into universal grammar is afforded by generalizing observations across languages. With this in mind, I will undertake such a study, here of a particular construction that has been traditionally associated with the Western Iranian languages: the *Ezāfé* construction. The Ezafe is, on the surface at least, a morpheme placed between a head (usually a noun) and its modifier, and one main method of modification in most Western Iranian languages.

The Western Iranian languages are thought to be descendants of dialects of Old Persian, or a closely related language. (Paul, 2008) Like most early Indo-European languages, Old Persian was highly synthetic, with a strong system of case morphology. By the time OP was supplanted by the various dialects of Middle Persian, however, the old case system had largely broken down. (Windfuhr, 1995) One of the structures that developed in the absence of case morphology is the *Ezafe* construction, which is thought to have developed from relative clauses headed by relative pronoun *hyā*, 'which'. (Kent, 1953) The construction itself probably originated from a reduced relative clause. (Karimi, 2007: 2160-2163)

Although Ezafe is a feature of nearly every Western Iranian language, the details of the construction vary significantly across languages. In this study, I will focus on the variation in both the Ezafe itself and its usage as it is found in four major Iranian languages: Persian (Farsi), Kurdish (the Kurmanji dialect), Western Gilaki, and Baluchi (or Balochi). Persian, the most famous Ezafe language, has been the focus of many studies, as we will see. Some work has also been done on other Ezafe languages, including Gilaki, a language spoken in the Caspian region of Iran. The Ezafe constructions in Kurmanji Kurdish and Baluchi, however, though similar to those of Persian and Gilaki respectively, have not been given the attention required to create a comprehensive analysis of Ezafe. By analyzing these four languages, I hope to contribute to the development of a thorough understanding of Ezafe, its variants, and its syntax.

Most of the Persian and Gilaki data presented in my paper are based directly on elicitations from a bilingual native speaker of Persian and Gilaki. The dialect of Gilaki spoken by my informant is that of Rasht/Bandar Anzali, which falls into the western group of dialects. Therefore, there are some lexical and grammatical differences between my data and that of other authors. The relevant construction, however, is the same in both dialects, and any other differences are minor. Additionally, although I cite examples from the literature wherever they are appropriate, I supplemented them with my own, particularly for Persian and Gilaki, but also for Kurdish. It is therefore my hope that, at the very least, this paper will be a valuable source for later comparative studies of Ezafe.

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1 The 'Ezafe' and 'Reverse Ezafe' Constructions

The Ezafe, generally speaking, is a grammatical element that appears between a modified element, usually an NP, and its modifier. Phonetically, the Ezafe is usually realized as a vowel attached to the first element in the construction. The Persian Ezafe, for example, which will be the basis of our comparison, is an unstressed vowel *–e* (or *-ye* after vowels except /i/) attached to the first element of an Ezafe construction (the modified)—e.g., *ketāb-e Ali*, book-**EZ** Ali, 'Ali's book'. The three most common uses of the Ezafe are to link nouns to modifying adjectives, nouns to their possessors, and denominal prepositions to their complements. However, Ezafe can also appear between other elements, depending on the particular language.

As has already been mentioned, Ezafe comes in two varieties. The first, called simply Ezafe (EZ), is found in Persian and Kurdish (among other languages) and is a construction where modifying elements are linked *postnominally* to their head by an Ezafe. The second, termed the 'Reverse' Ezafe (REZ) is found in Gilaki and Baluchi, and links modifiers *prenominally*. We will now examine these particular varieties of Ezafe as they appear in the four above-mentioned languages.

1.1   The (head-final) Ezafe

1.1.1 Persian Ezafe

The general behavior of Ezafe can be broadly captured through an examination of data from Persian. The Persian Ezafe appears:

i.   between a head noun[2] and a second possessor NP:

    (1) ketāb-**e** Ali (Kahnemuyipour, 2006: 1)
       book-**EZ** Ali
       'Ali's book'

ii.   between a head noun and modifying adjectives:

    (2) gol   -**e** sorx-**e** bozorg
       flower-**EZ** red -**EZ** big
       '(a) big red flower'

iii.   with certain prepositions before a noun:

    (3) tu-**ye** otāq -**e** man
       in-**EZ** room-**EZ** me
       'in my room'

but not all:

    (4) az   (*-**e**) otāq -**e** man
       from(*-**EZ**) room-**EZ** me
       'from my room'

iv.   between a head noun and a PP, AP, or non-finite Relative Clause/CP

    (5) a. otāq -**e** kuchik-**e** [PP zir   -**e** širvuni]-**e** Ali (Samiian, 1983: 39)
          room-**EZ** small -**EZ**   under-**EZ** roof   -**EZ** Ali
          'Ali's small room under the roof'

        b. mard-**e** [AP negarān-**e** bačče-hā -yaš]   vāred šod
          man -**EZ**   worried -**EZ** child -PLUR-PAF.3.SG[3] entered become.PAS
          (Samvelian, 2007: 615)
          'the man (who was) worried about his children entered'

    (6) qazā-**ye** [RC dobār poxte   (shode)]
       food-**EZ**   twice cook.PASTPART (become.PASTPART)
       'twice-cooked food'

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[2] In this paper, I will refer to the modified element of the Ezafe construction as the 'head noun', which does not necessarily refer to its actual syntactic role, but rather only its use in the Ezafe construction.   CATEGORIAL STATUS

[3] Persian also has a set of so-called 'possessive affixes/enclitics' which can be used for pronominal possessors, and which are mutually exclusive with Ezafe (see Samvelian, 2007: 621-622 for more).

v.　　combinations of the above:

(7) [$_{DP/NP}$ in　ketāb]-**e** [$_{AP}$ kohne]-**ye** [$_{PP}$ bi　　arzeš]-**e**　maryam
　　　　this book -**EZ**　old　　-**EZ**　without value -**EZ** Maryam
　　　'this ancient worthless book of Maryam's' (Samvelian, 2007: 606)

Thus, the behavior of the Persian Ezafe itself may be generalized as a particle that signals modification of the element directly to its left.

There are several important limitations to the use of Ezafe. As noted above, for example, only some prepositions can take an Ezafe. Samiian (1994) categorizes prepositions in Persian into three classes: a) prepositions that cannot take Ezafe (P1); b) prepositions that necessarily take Ezafe (P2); and c) prepositions which optionally take Ezafe (P3).

(8) P1 (no Ezafe)

　a.　be(*-**ye**) miz
　　　to (-**EZ**) table
　　　'to the table'

　b.　az　(*-**e**) miz
　　　from(-**EZ**) table
　　　'from the table'

(9) P2 and P3 (with Ezafe) (modified from Larson & Yamakido, 2005: 4)

　a.　zir　-**e**　miz　　　(P2)
　　　under-**EZ** table
　　　'under the table'

　b.　ru(-**ye**) miz　　　(P3)
　　　on(–**EZ**) table
　　　'on the table'

Samiian and others have noted that, while P1 prepositions seem to correspond well with what we would call 'pure prepositions', P2 and P3 are actually derived from,

and show certain similarities with, nouns. For example, they can appear after determiners and bear plural morphology. (Larson & Yamakido: 5)

(10) a. in   ru
         this top
         'up here'

   b. un   zir   -hā   (Larson & Yamakido, 4)
      that under-PLUR
      'way down there'

Additionally, only PPs headed by P2 or P3 prepositions can modify an NP in an Ezafe construction.

(11) a. ketāb-e [PP ru (-ye) miz]
         book -EZ   on(-EZ) table
         'the book on the table'

   b. ketāb(*-e) [PP az   Irān]
      book (-EZ)   from Iran
      'the book from Iran'

P2 and P3 prepositions, then, seem to behave quasi-nominally in Persian.
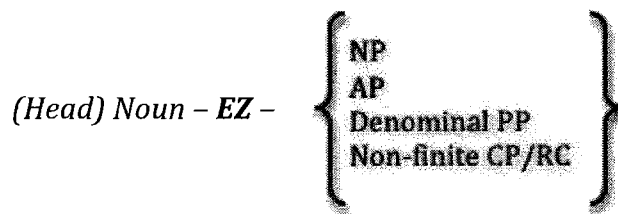
Another modifying element that we might expect to require Ezafe is a modifying CP/RC. However, Persian finite RCs do not take Ezafe. Rather, in Persian, a separate relativizing particle –i, which is mutually exclusive with Ezafe, usually (but not always) appears instead:

(12) a. (ān)   mard(*-e)   ke   man didam
         (that) man   -EZ [CP that I   saw.1.SG]
         'the man that I saw'

   b. (ān)   mard-i   ke   man didam
      (that) man -REL [CP that I   saw.1.SG]

The absence of Ezafe preceding CP, combined with the facts about modifying PPs above, may seem to be surprising exceptions to the general pattern of Ezafe outlined above. However, it leaves us with an interesting fact about Ezafe, first noticed by

Samiian (1983, 1994). Samiian points out that the only elements that can take Ezafe are NP, AP, denominal PP, and non-finite CP; additionally, she argues that these are all [+N] (that is, nominal) in nature, and that *Ezafe can only appear between two [+N] categories*. Although I will not discuss here the theoretical assumptions underlying the labeling of these categories as [+N], I maintain Samiian's generalization regarding the distribution of Ezafe.

(13) General Persian Ezafe Construction (Following Samiian 1983, 1994)[4]:

$$
\textit{(Head) Noun} - \textbf{\textit{EZ}} - \left\{ \begin{array}{l} \textbf{NP} \\ \textbf{AP} \\ \textbf{Denominal PP} \\ \textbf{Non-finite CP/RC} \end{array} \right\}
$$

As we will see, each Western Iranian language possesses a variant of this construction, all of which are fundamentally similar, but which differ in details of agreement, the order of constituents, and the elements which they permit to appear in an Ezafe construction.

1.1.2 Kurmanji Kurdish Ezafe

Kurdish also has an Ezafe construction, similar to that of Persian. Kurdish Ezafe, however, has a number of major differences with its Persian counterpart. First, and most importantly for my analysis, while Persian Ezafe is morphologically invariable, Kurdish Ezafe agrees in gender (which Persian lacks) and number with

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[4] While in principle the modified element in an Ezafe construction can be *any* [+N] element, I will continue to refer to it as the head noun, as in practice it is almost always a noun or NP.

the head noun of the construction, taking three forms: -ê or -yê after a vowel (masculine), -a or -ya (feminine), and –ên or –yên (common plural).

(14) a. xanî   **-yê** wî   mirovî   (Kurdish)
        house(m)–EZ.MAS that.OBL man.OBL
        'that man's house'

    b. xāne   **-ye** ān   mard   (Persian)
       house   –EZ   that   man

(15) a. ode   **-ya**   rûnîştinê   (Kurdish; Thackston, 2006: 13)
        room(f)-EZ.FEM sitting.OBL
        'sitting room'

    b. otaq   **-e**   neshiman   (Persian)
       room   -EZ   sitting

Notice also that the possessor in Kurdish noun-noun Ezafe constructions is always in the oblique case, whereas Persian has no case morphology system, and hence makes no morphological distinction.

(16) a. xanî   **-yên** wî   mirovî   (Kurdish)
        house (pl)–EZ.PLUR that.OBL man.OBL
        'that man's houses'

    b. xāne-hā **-ye**   ān   mard   (Persian)
       house-pl -EZ   that   man

As we will see, most accounts of Ezafe do not take into consideration the agreement facts of Kurdish Ezafe, which actually provide valuable insight into the deep structure of the construction.

Another important difference between Kurdish and Persian Ezafe is that Kurdish has a so-called 'independent' or 'second' Ezafe, which occurs when the head noun is modified by several elements. This 'second' Ezafe, like the first, always agrees with the noun that it modifies, and takes the form yê (m), ya (f) or yên (pl).

(17) a. kitêb -a   [mirov -e   kurdî]
        book(f)-**EZ.Fem** man(m)-**EZ.Mas** Kurdish
        'the Kurdish man's book'

   b. [kitêb-**a**   mirov] **ya**   kurdî
        book-**EZ.Fem** man   **EZ(2).Fem** Kurdish
        'the man's Kurdish book'

   c. [kitêb-**a**   kurdî] **ya**   mirov
        book-**EZ.Fem** Kurdish **EZ(2).Fem** man,
        'the man's Kurdish book'

It appears that b. and c. are interchangeable, with perhaps a difference in emphasis.

(Thackston, 2006: 15-19) This freer word order creates interesting minimal pairs with Persian, which allows little variation in the order of constituents in an Ezafe construction.

(18) a. kitêb-**a**   mirov-**ê**   kurdî   (Kurdish)
        book-**EZ.Fem** man -**EZ.Mas** Kurdish
        'the Kurdish man's book'

   b. ketāb-**e**   mard -**e**   kordi   (Persian)
        book-**EZ**   man -**EZ**   Kurdish

(19) a. kitêb-**a**   mirov **ya**   kurdî   (Kurdish)
        book-**EZ.Fem** man   **EZ(2).Fem** Kurdish,
        'the man's Kurdish book'

   b. ketāb-**e**   mard -**e**   kordi   (Persian)
        book-**EZ**   man -**EZ**   Kurdish
        *'the man's Kurdish book'

Notice that the Persian example in (19b) has an ungrammatical reading, even though the example itself is grammatical with the reading in (18b). The reading in (19b), 'the man's Kurdish book', can only be expressed as follows in Persian—though it is only optionally constructed as such in Kurdish.

(20) a. kitêb-**a**   kurdî **ya**   mirov (Kurdish)
         book-**EZ.FEM** Kurdish **EZ(2).FEM** man,
         'the man's Kurdish book'

     b. ketāb-**e**   kordi -**e**   mard (Persian)
        book-**EZ**   Kurdish -**EZ**   man

As can be seen from 18-20, the Kurdish Ezafe allows a much freer order of constituents than its Persian counterpart. It is interesting to note that there may indeed be some sort of connection between strong agreement morphology and movement as exhibited in the Kurdish data.

Finally, Ezafe has a wider distribution in Kurdish than in Persian, and can appear between an NP and *any* modifying element, including non-denominal PP (usually circumpositional in Kurdish) and finite RCs.

(21) a. ew mirov-**ê**   [CP ku min dît]   (Kurdish)
         that man -**EZ.MAS**   that me.OBL saw.3.SG[5]
         'the man that I saw'

     b. ān mard(*-**e**)[6] [CP ke man   didam (Persian)
        that man -**EZ**   that I   saw.1.SG

(22) a. ev pirtûk-**a**   [PP **di** dest -**ê**   we   **de**] (Kurdish)
        this book -**EZ.FEM**   **in** hand-**EZ.MAS** you.OBL **at**]
        'this book in your hand'

     a. in ketāb(*-**e**)   [PP **dar** dast -**e**   šomā] (Persian)
        this book -**EZ**   **in** hand-**EZ**   you]

Although I will briefly discuss this difference in particular, the distribution of Ezafe is a very interesting aspect of the construction, and merits further detailed research, both within individual languages and cross-linguistically.

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[5] Unlike Persian, Kurdish uses an ergative construction in the past tense.
[6] As noted above, Persian would usually have a particle *–i* where we might expect the Ezafe. This is not obligatory, though it is preferred.

In summary, the two main head-initial Ezafe constructions can be written as follows:

(23) a. General Kurdish Ezafe Construction:

$$(Head)\ Noun_i - \textbf{\textit{EZ}}_i\ -\ \left\{\begin{array}{l} NP \\ AP \\ PP \\ CP/RC \end{array}\right\}$$

b. General Persian Ezafe Construction:

$$(Head)\ Noun\ -\ \textbf{\textit{EZ}}\ -\ \left\{\begin{array}{l} NP \\ AP \\ Denominal\ PP \\ Non\text{-}finite\ CP/RC \end{array}\right\}$$

Note the coindexation of Kurdish Ezafe with its antecedent, which I intend to convey agreement.

1.2 The (head-final) 'Reverse' Ezafe

1.2.1 The Gilaki 'Reverse' Ezafe

While the Persian Ezafe construction in particular has attracted significant attention in the literature, a second type of Ezafe, commonly known as the 'Reverse' Ezafe, also exists. This Reverse Ezafe is found chiefly in Gilaki, where it is realized as an unstressed *-ə/-i* (unpronounced after a vowel)—but it also appears in Baluchi. Reverse Ezafe (REZ)[7] differs from Persian Ezafe most significantly in that, instead of signaling modification in a head-initial construction, Reverse Ezafe is head-final— i.e., *Ezafe and Reverse Ezafe constructions are virtually mirror images of one another:*

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[7] Although I use the term Reverse Ezafe/REZ to mean the head-final Ezafe construction, this is merely a matter of convenience and does not necessarily represent a different syntactic relationship from Ezafe/EZ.
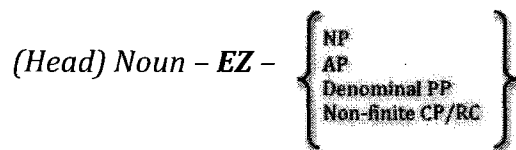
11

(24) a. pəsər-ə kitāb   (Gilaki)
          boy -**REZ** book,
          'the boy's book'

     b. ketāb-**e** pesar   (Persian)
        book-**EZ** boy

(25) a. pillə(-Ø)   surx-ə   gul   (Gilaki)
          big (-**REZ**) red -**REZ** flower
          'big red flower'

     b. gol   -**e** sorx-**e**   bozorg   (Persian)
        flower-**EZ** red -**EZ** big

(26) a. [PP mi utaɣ -ə   mian]-ə   kohnə(-Ø)   kitāb   (Gilaki)
          my room-**REZ** in   -**REZ** old   (-**REZ**) book
          'the old book (that is) in my room'

     b. ketāb-**e** kohne-**ye** [PP tu-**ye** otāq -**e**   man]   (Persian)
        book -**EZ** old   -**EZ**   in-**EZ** room-**EZ** me

The Gilaki Ezafe appears only between the same elements as in Persian (i.e.,
Samiian's [+N] categories), but with the opposite order of constituents, as can be
seen from the data above. In fact, this behavior can be captured in much the same
way as for Persian Ezafe:

(27) a. General Gilaki (Reverse) Ezafe Construction:

$$\left\{ \begin{array}{l} \text{NP} \\ \text{AP} \\ \text{Denominal PP} \\ \text{Non-finite CP/RC} \end{array} \right\} - \textbf{REZ} - \textit{(Head) Noun}$$

b. General Persian Ezafe Construction:

$$\textit{(Head) Noun} - \textbf{EZ} - \left\{ \begin{array}{l} \text{NP} \\ \text{AP} \\ \text{Denominal PP} \\ \text{Non-finite CP/RC} \end{array} \right\}$$
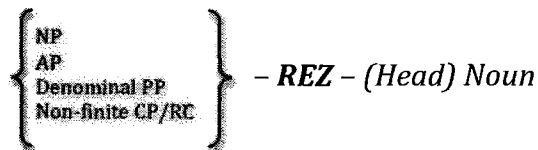
What is perhaps just as striking as the systematic contrast between Ezafe and Reverse Ezafe constructions is the complete lack of any other significant word-order differences between Persian and Gilaki, such that the two languages have nearly identical word order outside of the Ezafe construction:

(28) a. (u) mərd-**a**[8] [RC ki mən bidem] (Gilaki)
(that) man **-REL** that I saw.1.SG
'the man that I saw'

b. (ān) mard-**i** [RC ke man didam] (Persian)
(that) man **-REL** that I saw.1.SG,

Note that Gilaki Reverse Ezafe is also invariant, and does not allow the free order of modifying constituents in the Ezafe chain that Kurdish does.

Finally, it should be noted that although the Reverse Ezafe predominates in Gilaki, head-initial Ezafe constructions can also be found.

(29) a. kitab-ə jild (Gilaki)
book-REZ cover
'the book's cover'

b. jild -**e**/-ə kitab
cover-**EZ** book
'the book's cover'

Though probably originally borrowings from Persian, the use of this variant is quite abundant in Gilaki, to the extent that (29a) and (29b) are more or less interchangeable.[9]

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[8] The relative varies between a~e~ə, but does not seem to resemble an Ezafe morpheme any more than its Persian counterpart: while (Reverse) Ezafe is silent post-vocalically in Gilaki, the relative particle is not.
[9] The distribution of Ezafe and Reverse Ezafe in Gilaki, and its relation to code-switching and dialectal mixing deserves further study. See Stilo, "Gilan: Languages" for more.

1.2.2   The Baluchi 'Reverse' Ezafe(s)

Outside of the Caspian region, the other major Reverse Ezafe language is Baluchi. The Baluchi Ezafe marker appears as *-ay/-e* after singular modifying nouns, and as *–ī* after plural nouns.[10] (Axenov, 2006)

(30) a. gis   **-ay** wāund mēmān   **-ay** abar -ā   uškit
      house-(OBL?)-**REZ** owner guest-(OBL?)-**EZ** word-OBJ hear.PAST.3SG
      'the owner of the house heard the guest's words'[11]

b. dukkān-ān   **-ī**   čīz -ān **-ī**   bahā -ā   γīmmat   kurt (p. 79)
    shop   -PLUR-**REZ** thing-PLUR-**REZ** price-OBJ expensive do.PAST.3SG
    'he raised the price of the shops' goods'

The distribution of the Baluchi Reverse Ezafe appears to be the same as that of the Gilaki construction, except that it is never used with adjectives.[12] Instead, a separate attributive marker, *-ēn/-īn*, is used when adjectives appear in the attributive position.

(31) a. rašīd **-ēn**   /(*-ay) jinēnzāg
      slender-**ATTR**/(-**EZ**) woman
      'a slender lady'

b. bēadab-**ēn**   zāg (Axenov: 86, 87)
    rude   -**ATTR** boy
    'a rude boy'

Though these two markers may appear at first glance to represent two different constructions, I posit that the 'attributive marker' is in fact a variant of Ezafe that appears when the modifier is an adjective.

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[10] Axenov (2006) speculates that the form *–ay* might be derived from original *–a* (the oblique suffix)+*-ī* (a 'genitive' suffix, or the Ezafe). This would parallel the Kurdish examples above, where the posessor appears in the oblique.
[11] I have slightly modified the glosses to more accurately represent the original Baluchi.
[12] Although like Gilaki, many dialects of Baluchi have adopted the Persian Ezafe construction with exactly the same distribution as in Persian. (See Jahani, 2003)

(32) General Baluchi (Reverse) Ezafe Construction:

$$
(i) \quad \left\{ \begin{matrix} \text{NP} \\ \text{Denominal PP} \\ \text{Non-finite CP/RC} \end{matrix} \right\} - \textbf{\textit{REZ (-ay/-ī)}} - \textit{(Head) Noun}
$$

(ii)　*AP – **(attributive) REZ (-ēn)** – (Head) Noun*

Why there are two forms of the (Reverse) Ezafe is not entirely clear, and I will not investigate the matter in much depth. However, it may be that Baluchi makes a distinction between adjectives and other [+N] categories in a way that the other Iranian languages do not.

1.3　Summary of Ezafe Constructions

As we have seen from the examples above (sections 1.1-1.2), the Ezafe construction varies significantly across languages. The most important of these differences are summarized here:

Figure 1: *Summary of major variants of Ezafe*

	a. EZ or REZ (Head-first or Head-last)?	b. Agreement with head NP?	c. Ezafe with _all_ modifiers?	d. Separate adjectival Ezafe?	e. Strict order of modifiers?
Persian	EZ	✗	✗	✗	✓
Kurdish	EZ	✓	✓	✗	✗
Gilaki	REZ	✗	✗	✗	✓
Baluchi	REZ	✗	✗	✓	✓

doesn't this exhibit agreement in NUMBER?

Despite this cross-linguistic variation, I propose that all Ezafe constructions represent the same basic syntactic phenomenon, and that a comprehensive analysis

of Ezafe can only be developed by taking into account the data from multiple Ezafe languages.

2 *Previous Proposals*

Ezafe has long been a source of interest both to traditional grammarians and to theoretical linguists. Though most analyses of Ezafe deal exclusively with the phenomenon in Persian, a few, such as Karimi (2007)—which investigates Sorani Kurdish—have branched off to explore other languages. I believe this focus on Persian to the exclusion of other Iranian languages to be detrimental to creating a comprehensive account of Ezafe. At the same time, the work done on Persian Ezafe offers a useful starting point, and a review of the major proposals is of the utmost value in developing a new account for Ezafe.

Among the most influential early syntactic analyses of Ezafe is that of Ghomeshi (1997), who argues that Persian nouns, adjectives, and prepositions are inherently non-projecting (meaning, essentially, that they cannot have filled specifier and complement positions), and that Ezafe is a means of head-adjoining multiple constituents. This has been shown rather convincingly not to be the case: NPs *can*, in fact, be modified by phrasal material.[13]

Studies of Ezafe have also been conducted from a morphological standpoint, among which Samvelian (2007) is one interesting example. Samvelian selects several criteria for evaluating the affixal status of Ezafe, including a) selectivity with respect to its host; b) arbitrary gaps in its distribution; and c) morphological

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[13] See, for example, Samvelian, 2007: 614-615, and Kahnemuyipour (2006)

idiosyncracies. Samvelian claims that Ezafe shows neither b) nor c), and adding these observations to the facts of Ezafe's complimentary distribution with several *e*↲ other enclitics, and its behavior when combined with coordination, she argues that Ezafe is actually *phrasal* affix. Samvelian continues by investigating Ezafe in Head-driven Phrase Structure Grammar (HPSG), and after discussing several details, reaffirms Ghomeshi's generalization that Persian possessor NPs are uniformly complements and never specifiers.

While this and other morphological analyses of Ezafe are valuable, I will focus solely on the syntax of Ezafe. I maintain that a thorough syntactic examination of Ezafe can best account for the cross-linguistic variation in the order of the constituents in an Ezafe construction, its agreement patterns, and its distribution. To that end, in developing my own analysis, I will focus on two recent proposals for Ezafe/Reverse Ezafe, and one proposal regarding possession as exhibited by the similar but unrelated Bantu associative marker.

2.1 Ezafe as a Case-assigner

2.1.1 As a Case-assigner in Persian: Larson & Yamakido (2005)

One prominent proposal is that Ezafe is related to Case. This is espoused in particular by Larson & Yamakido (2005) and Yamakido (2005), who posit that Ezafe is a Case-assigner. Building off the early syntactic account of Samiian (1983, 1994), they argue that Ezafe is a form of Case-marking [+N] modifiers of NP. While I hope to show that this analysis cannot adequately account for data from Kurdish in

particular, the intuitions on which the proposal is based are important for understanding Ezafe, and offer a solid theoretical starting point for further study.

Several key observations underlie the Case-assignment analysis of Ezafe. One is that all nouns, adjectives, denominal prepositions, and non-finite relative clauses behave similarly in Ezafe constructions. This led first Samiian, and then Larson & Yamakido to posit that, in Persian, these elements are all [+N], and by extension of the Case Filter, all require Case. The has been termed the 'Extended Case Filter'.

(33) Extended Case Filter

All [+N] categories must receive Case (Yamakido, 2005: 114)

This observation is supported, in part, by the general linguistic observation that nouns, adjectives, denominal prepositions, and participles are usually the elements that can bear case morphology in the world's languages.

The second assumption that Larson & Yamakido adopt regards the structure of DP. Specifically, they propose that D has a similar structure to V[14]: like V, D has shells, D and δ; and like V/v, D/δ is a Case-assigner, but can only assign Case to one argument. Larson & Yamakido further propose that in general, modifiers of NP are the lowest complements of D (that is, *below* the modified NP), and that the D head will assign Case to the one NP restriction of D/δ as it moves over the NP, leaving the modifier without Case. While this is fine for [-N] modifiers (such as finite CP), it is *not* acceptable for [+N] modifiers.

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[14] This is based on parallels drawn between the argument structure of DP and VP which, though important to the analysis, I will not discuss in depth here.

Figure 2: *Modifiers in base position* (Larson & Yamakido: 8)

*a.* *[-N] modifier does not need Case*   *b.* *[+N] modifier needs Case*
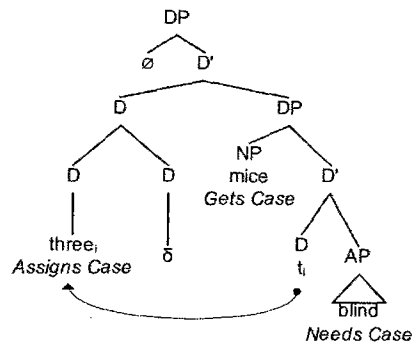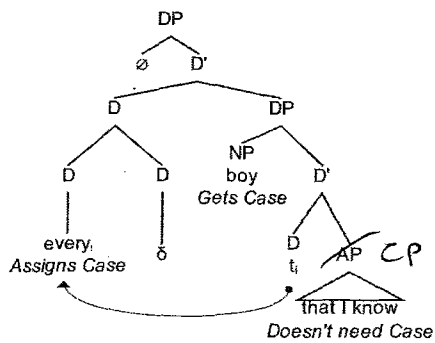
Hence, Larson & Yamakido propose that either [+N] modifiers must raise to a position where they can receive Case, presumably between D/δ and NP; or they must receive Case from another element. In Persian, this element is the Ezafe.

(34) Ezafe (Larson & Yamakido)

> *The Ezafe is an element that assigns Case to [+N] categories in base position when they do not receive Case from D or through concord.*

Larson & Yamakido do not detail the exact structure of Ezafe, but because they describe Ezafe as a 'prepositional' element, it would most likely head its own projection inserted at the appropriate point in the derivation, with the [+N] modifier as its complement. It then assigns Case to its complement, allowing it to remain *in situ*.

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Figure 3: *Ezafe construction in Persian (based on Larson & Yamakido)*
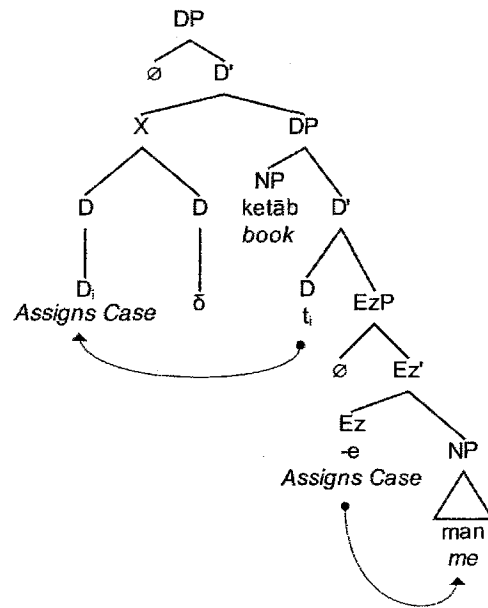
The Case-assigner proposal for Ezafe seems to work nicely for Persian. But it should already be clear that analyses for other Ezafe languages may be more problematic.

2.1.2 As a 'concordializer' in Gilaki: Larson (2009)

Building on Larson & Yamakido (2005) and Yamakido (2005), Larson (2009) hypothesizes that the Reverse Ezafe is also related to Case-marking. Returning to the assumptions behind Larson & Yamakido (2005), Larson equates the behavior of Ezafe with a 'super *of*' construction: Ezafe behaves like English *of*, but can appear before *any* [+N] element (pp. 7-10). Following this analogy, Larson makes another connection between Ezafe and English possessive constructions, and equates the

Reverse Ezafe with 'super 's'. Persian is thus a 'super-nominal' language, treating all [+N] modifiers like nouns in other languages.

In Larson & Yamakido's proposal, nouns that do not have an alternate means of receiving Case must move to a position where they can receive it through what they term concord.[15] This is precisely what Larson (2009) argues happens in Gilaki. [+N] modifiers move to a position *above the NP* where they can receive Case through concord with the NP-restriction of D: as D probes its c-command domain for viable Goals, it assigns Case to all intervening [+N] categories until it reaches its NP Goal (the head noun). The Reverse Ezafe is therefore an element that allows [+N] modifiers to raise to a position where they can receive Case.

(35) Reverse Ezafe (Larson)

> The Reverse Ezafe is an element that allows [+N] categories to raise and receive Case through concord with another [+N] category that receives Case from D/δ.

Larson therefore calls the Reverse Ezafe a *concordializer* or an *adjectivalizer*.

In summary, the Case-assigner analysis of Ezafe, as proposed by Larson & Yamakido (2005) and Larson (2009), posits that Iranian languages have two general means of assigning Case to [+N] modifiers, Ezafe and Reverse Ezafe, which behave similarly to English '–'s' and 'of'. This is summarized in (36) below. (Larson: 15)

(36) a.   N **[of/EZ** XP]   (OK: of/EZ assigns Case *in situ*)
    b.   N **[XP-'s/-REZ]** (Impossible: cannot receive Case)
    c.   **[XP-'s/-REZ]** N   (OK: XP gets Case through concord)

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[15] I will discuss the nature of concord in a later section.

2.1.3 Theoretical problems with a Case-assigner analysis of Ezafe

Larson & Yamakido (2005), Yamakido (2005) and Larson (2009) explain the function of Ezafe in Persian and Gilaki rather convincingly at first glance. There are, however, significant drawbacks to the Case approach to Ezafe. First of all, however convenient the label may be, assigning [+N] status to NP, AP, denominal PP and non-finite RC/CP is a stipulation, designed to fit the data from Persian and Gilaki in particular. Second, Larson assumes that Ezafe and Reverse Ezafe are fundamentally *different* constructions. This is not intuitive given that Ezafe and Reverse Ezafe are nearly identical constructions with only a difference of word order, and are phonologically very similar. Most importantly, however, the data used in both analyses are limited, and do not reflect Ezafe's range of distribution across languages. Specifically, Case-assignment as they have formulated it seems to be incompatible with the agreement features and the distribution of Ezafe in languages like Kurdish. Remember that Kurdish allows Ezafe before *all* PPs and RCs/CPs— which would require us to stipulate that in Kurdish, these elements are also [+N] and require Case. Kurdish Ezafe would then be a 'super-super *of*', and Kurdish a 'super-super-nominal' language.

The data from Kurdish also provides counterevidence in another way. Though only referenced in passing in Larson & Yamakido (2005) and Larson (2009), I take the basic relation that allows Case-assignment (or Case-checking) in Ezafe and Reverse Ezafe constructions to be one of Probe and Goal, as first put forward by Chomsky (2000, 2001). Although there are several formulations of this relation, I adopt here a version outlined in Carstens (2001), who proposes that Case-valuation

is an optional feature of AGREE.[16] AGREE is a relation that holds in a c-command configuration. Thus, uninterpretable features can be checked in base position, provided that (a)-(d) below apply.

> *(37) AGREE* (Carstens, 2001: 151)

> AGREE operates as follows:

> (a)   A Probe α has uninterpretable ϕ-features
> (b)   A Goal β has matching ϕ-features, and is c-commanded by α
> (c)   Uninterpretable ϕ-features are valued, then delete
> (d)   If α has an intrinsic structural Case value, it values any unvalued Case feature of β; the two Case features then delete.

Notice that Case-valuation is not a required component of the AGREE operation: rather, some grammatical elements assign Case while others do not. Carstens (2001) presents a strong argument for non-Case-assigning AGREE as the primary relation behind concord-type agreement patterns, such as adjectives in many languages (e.g., Romance and Bantu). I posit that this interpretation of concord-type agreement as the result of non-Case-assigning AGREE operations fits neatly with the facts from Ezafe languages, and I will make reference to it later in my analysis.

Returning to Larson & Yamakido (2005), if AGREE is assigning Case to [+N] modifiers *in situ* as they predict, we are left with a fundamental problem: any uninterpretable ϕ-features realized on the Ezafe should reflect the ϕ-features of its Goal, i.e. the [+N] modifier. These shared ϕ-features do not appear on Persian Ezafe, which has no feature agreement. Kurdish Ezafe, on the other hand, does realize ϕ-features morphologically on the Ezafe—yet these features agree not with the [+N]

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[16] For an alternate version, see Heck, 2007: 215

modifier which Larson & Yamakido hypothesize Ezafe probes, but with the head noun of the construction:

(38) a. xanî   **-yê**   wî   mirovî   (Kurdish)
house **(m)–EZ.MAS** that.OBL man.OBL
'that man's house'

b. ode   **-ya**   rûnîştinê   (Thackston, 13)
room**(f)-EZ.FEM** sitting.OBL
'sitting room'

c. xanî   **-yên**   wî   mirovî
house **(pl)–EZ.PLUR** that.OBL man.OBL
'that man's houses'

This data is surprising given the standard version of the Probe-Goal framework that we have adopted. The Probe is generally thought to check its uninterpretable ϕ-features on its Goal in exchange for Case. Ezafe should therefore exhibit ϕ-feature agreement with its complement, the [+N] modifier. This is obviously not what happens in Kurdish, raising doubt on a purely Case-assigner analysis of Ezafe.

Shouldn't Baluchi also be mentioned here, as the Ezaf morpheme shows sensitivity to the number of the head noun?

2.2   Ezafe as the reflex of movement: Kahnemuyipour (2006)

Another recent syntactic account is that of Kahnemuyipour (2000, 2006), who takes a very different view of Ezafe. Kahnemuyipour argues that the word order of Persian Ezafe constructions (Head-EZ-Modifier) is derived, and that the merge order is actually Modifier-EZ-Head. Kahnemuyipour's motivation for assuming a head-final order is based in large part on Cinque (1996, 2005), who posits an underlying Adj>Noun order, with all other orders derived. Kahnemuyipour points to compounds for language-internal evidence, which are largely head-final in Persian:

(39) a. gol   -āb
        flower-water
        'rose-water'

   b. bozorg-mard
        big   -man
        'great man'

   c. ketāb-xune
        book -house
        'library'

While head-initial compounds also exist, Kahnemuyipour believes that many of them were historically Ezafe constructions that lost the Ezafe. Compare 'orange juice' and 'apple juice' in Persian:

(40) a. āb   -porteqāl
        water-orange
        'orange juice'

   b. āb   -e sib   (p. 2)
        water-**EZ** apple
        'apple juice'

Kahnemuyipour argues that compounds like the one in (40a) were originally Ezafe constructions like (40b), but that the Ezafe vowel was lost over time—the contrast between (40a) and (40b) following from the fact that orange juice is much more common in Persian-speaking areas than apple juice. While by no means probative, I find these intuitions to be valuable.

Based on these examples, Kahnemuyipour argues that the underlying structure of Ezafe constructions is actually Modifier-EZ-Head. He begins his analysis by arguing that all modifiers actually originate in the specifier position of a projection above NP, which he calls Mod(ifier) P(hrase), which has a silent head Mod[0]. The head noun itself originates as the complement of Mod[0].

Figure 4: *Structure of ModP:* sag-e gonde, *'huge dog'*
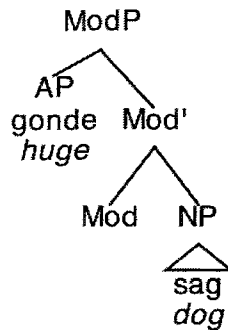
Notice that at this stage in the derivation, there is no Ezafe present. Kahnemuyipour posits that the Ezafe vowel only appears later, as the overt realization of the head Mod^0 after movement. Thus, making a link between overt morphology and overt movement in the vein of Aoun, et al. (1994), Kahnemuyipour argues that Ezafe is simply the *overt morphological realization of overt movement.*

In Kahnemuyipour's account, the head Mod^0 and its complement move in a 'roll-up' motion (following Cinque, 2005) to the head and specifier position, respectively, of an unnamed functional projection XP. In successive Ezafe constructions, this entire XP then moves up, as does the Mod^0 above it. Kahnemuyipour illustrates the capability of this roll-up type movement to account for complex Ezafe constructions, such as the one in (41):

    (41) raftār   **-e** [AP xeyli dūr az   entezār] **-e** [NP ra'is jomhur] (p. 8)
           behavior-**EZ**   very far from expection-**EZ**   president
           'the president's totally unexpected behavior'

Figure 5: *'Roll-up' movement and realization of Ezafe*
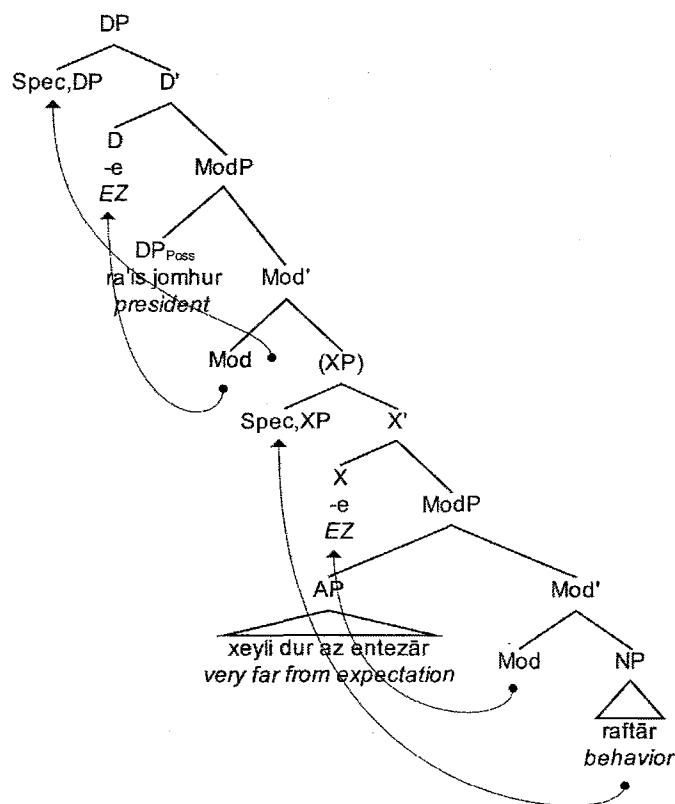
Therefore, in Kahnemuyipour's analysis, Ezafe does not have any 'special role' other than normal modification, as it is simply overt realization of a standard feature of language: the Modifier Phrase.

Like the Case-assigner analysis of Ezafe, however, Kahnemuyipour's proposal has several shortcomings. One is that it does not account for the agreement patterns of Kurdish Ezafe. Kahnemuyipour posits that Ezafe is simply the phonetic realization of the feature [Mod] as a reflex of movement. This does not explain the appearance of uninterpretable ϕ-features on Kurdish Ezafe, which would require Ezafe to be more than just one overtly realized feature [Mod].

More importantly, Kahnemuyipour's account fails to adequately explain the distribution of Ezafe. For example, in Kahnemuyipour's account, examples like (12) above (*ketāb(*-e) az Iran,* book(*-**EZ**) from Iran) should be unproblematic, as there is no constraint on what can appear in the Specifier position of ModP:

Figure 6: *Ungrammatical derivation of* ketāb(*-e) az Iran, *'a book from Iran'.*
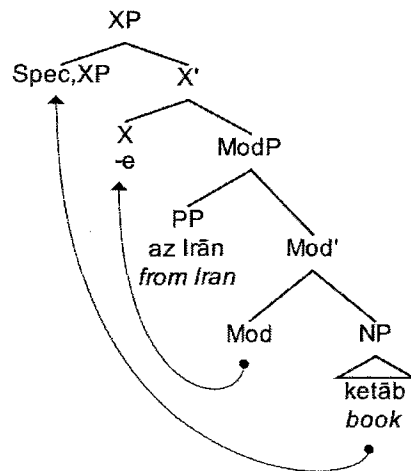
Examples like this a present challenge to Kahnemuyipour's analysis, and have not been thoroughly addressed. Nevertheless, I maintain that the intuitions underlying Kahnemuyipour's proposal are on the whole sound, and that, combined with other accounts, it may form a strong basis for a more complete analysis of Ezafe.

2.3   The Swahili associative marker: Carstens (2001)

Thus far, we have looked at the Ezafe morpheme as a phenomenon exclusive to the Iranian languages. Yet constructions that pattern very similarly to Ezafe show up in many parts of the world, including in the Bantu languages. Bantu languages like Swahili and Zulu have an 'associative marker', which appears between two

nouns, or a noun and certain modifying phrases—though not between a noun and an adjective. Like Kurdish Ezafe, the Bantu associative marker agrees in ϕ-features (here, noun class) with the head noun, and not with the possessor or modifier.

(42) a. **ki**ti **ch**a **mw**alimu   (Swahili: Carstens, 2001: 155)
        7-chair 7-ASS 1 –teacher
        'the teachers' chair'

    b. **in**dlu **ya** -seThekwini   (Zulu)
        9-house 9-ASS-in Durban
        'the house in Durban'

As is apparent from these examples, agreement appears exclusively between the associative marker and the head noun, and is unaffected by non-nominal modifiers.

Although the respective distributions of the Bantu associative marker and Ezafe are not identical, it is plausible that an analysis for Bantu could be extended to Ezafe. Carstens (2001) provides such an analysis. Carstens notes that in Case-assigner analyses of constructions like in (42), we would expect agreement between the associative marker (the Ezafe) and the possessor (or modifier) if our merge order were Head>ASS>Poss. We see no such agreement. Carstens therefore argues that the agreement morphology on the Bantu associative marker is the result of a (non-Case-assigning) AGREE operation between the marker and the modified noun in the merge position. This is realized structurally as a projection nP with the associative marker in its head, and the NP in its complement position. The associative marker (or more generally n^0) then probes NP, valuing its own uninterpretable ϕ-features. (Figure 7a)

This accounts for agreement morphology, but what about word order? The only solution is to derive it by movement. In languages like Swahili, Carstens

suggests that an optional EPP feature on n^0 causes raising of the NP complement to the *outer* specifier of nP.

**Figure 7:** *Underlying structure for associative-marker type possessives* (pp. 156-158)

a. *Agreement between n^0 and complement* *b.* *Raising of complement*
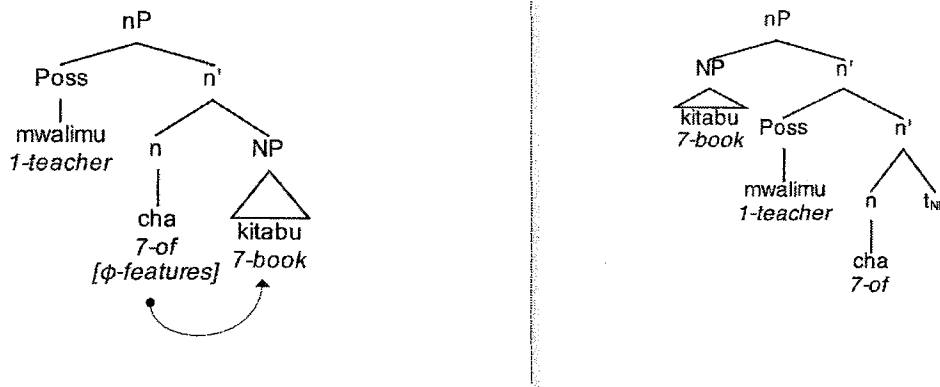
At this point, Carstens proposes that a silent functional projection (FP) is merged above nP, which triggers a second AGREE operation with NP. NP in turn raises to Spec,FP. Finally, n^0 head adjoins with F^0, yielding the observed word order:

Figure 8: *Derivation of final word order* (p. 158)

a. *Merge FP and AGREE with NP, which raises* *b.* *Head-adjoin n^0 with F*

30
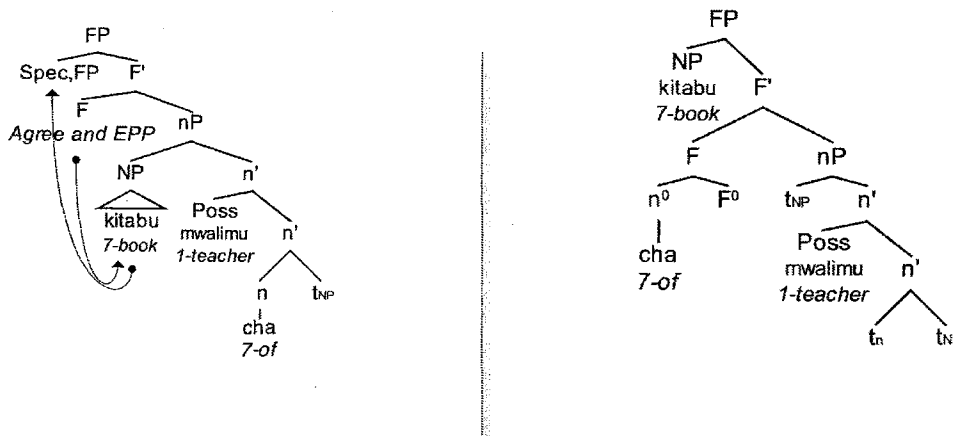
Carstens does not define the content of FP in Swahili, but introduces it primarily to derive the proper word order. Most importantly, she argues that there is never an AGREE operation between F^0 and the possessor in Swahili, which accounts for the lack of morphological agreement between the Ezafe and the possessor.[17] Carstens posits that the Bantu associative marker is therefore *not* a Case-assigner.

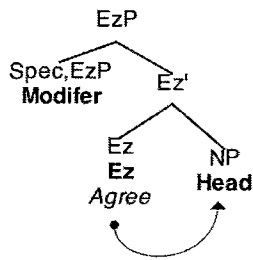## 3 A New Analysis of Ezafe

3.1 The derivation of Ezafe constructions

Based in particular on Kahnemuyipour (2006) and Carstens (2001), but drawing on Larson & Yamakido (2006) and Larson (2009), I propose here a new analysis of Ezafe, taking into account both the agreement facts and the distribution of Ezafe. Building on Carstens's analysis of the Swahili associative marker and other 'of'-like elements, and Kahnemuyipour's analysis of Persian Ezafe constructions, I propose that the Ezafe heads its own projection, which I will refer to tentatively as EzP. Similarly, I propose that the head noun of an Ezafe-type construction is generated in the complement position of Ez, and that its modifier appears in Spec,EzP. Continuing as in Carstens's account, Ezafe enters into a *non-Case-assigning* AGREE relation with its complement.

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[17] But perhaps double agreement does occur in other Bantu languages. In Zulu, for instance, the form of the associative marker depends on the class of both the possessor and the possessee, e.g. *igama l-a intombe*, 5-name **5-ASS** 9-girl, 'the girl's name', but *'igama li-ka (u)thisha'*, 5-name **5-ASS**$_{Class1}$ 1-teacher, 'the teacher's name'. These constructions would make an interesting course of study.
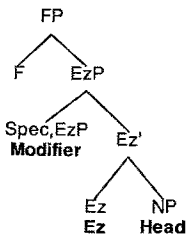
Figure 9: *The EzP: Modifier>Ez>Head (noun)*

```
              EzP
          ╱        ╲
    Spec,EzP       Ez'
    Modifer      ╱    ╲
               Ez      NP
               Ez     Head
              Agree     ▲
                •_____╱
```
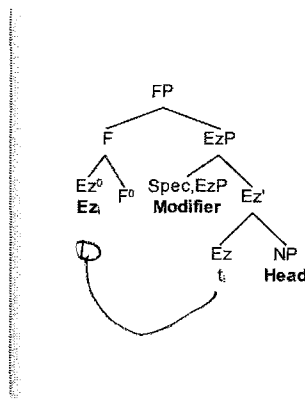
From here, however, the derivation I propose diverges from the structure of possessives as proposed by Carstens. Rather than assuming that the head noun moves up to the outer specifier of Ez to fulfill a *second* EPP feature, I posit that it remains *in situ* until later in the derivation. From here, the derivation continues with the merging of F, and the head-adjunction of Ez^0, as shown below:

Figure 10: *Merge F and head-adjoin*

(a)   Merge F

(b) Ez^0 head adjoins to F^0

```
          FP
        ╱    ╲
       F      EzP
            ╱    ╲
      Spec,EzP   Ez'
      Modifier  ╱   ╲
               Ez    NP
               Ez   Head
```

```
             FP
           ╱     ╲
          F        EzP
                 ╱     ╲
      Ez⁰ F₀  Spec,EzP  Ez'
      Ez₁     Modifier  ╱  ╲
       ╱               Ez   NP
      ╱                t    Head
       ╲_____╱
```

I now assume that F^0 has an optional EPP feature that can be fulfilled either by the head noun, or by the modifier in Spec,EzP—which, following Chomsky (1993), count

as equidistant after the adjunction of Ez^0.[18] The former movement (head noun to Spec,FP) yields the order we find in Persian and Kurdish, while the latter (modifier to Spec,FP) results in a Gilaki- or Baluchi-style 'Reverse' Ezafe construction.

Figure 11: *Ezafe and Reverse Ezafe Constructions*

(a) Persian/Kurdish Ezafe

(b) Gilaki/Baluchi Ezafe
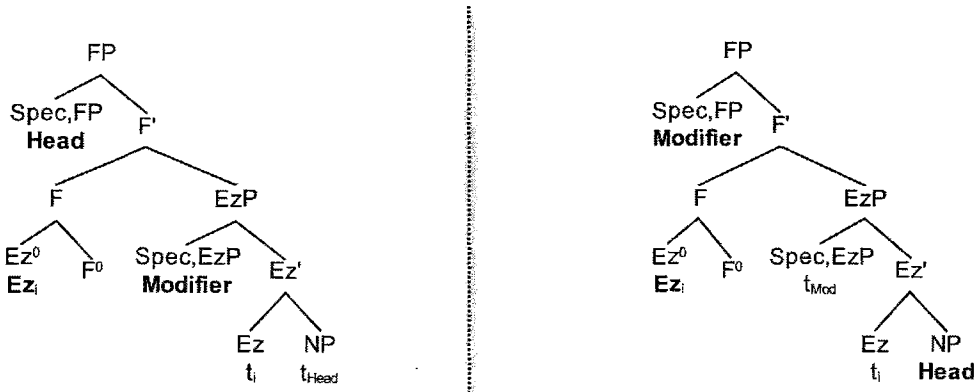
For Ezafe constructions with multiple modifiers, we then merge another Ezafe, EzP_2 and FP_2, above FP_1. This is followed by raising of a) FP_1 to Spec,FP_2, as happens in Persian and sometimes in Kurdish; b) the head noun alone to Spec,FP_2 as happens only in Kurdish; or c) Ez_2^0 and the second modifier to F_2^0 and Spec,FP_2 respectively, as happens in Gilaki and Baluchi.

The difference between options a) and b) allows us to explain the minimal pairs found in (18-20) above: whereas Persian only allows movement of the entire FP (pied piping), Kurdish also permits movement of the head noun to the specifier

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[18] It can be argued that if the head and the modifier count as equidistant, any Ezafe language might have free choice in selecting which element to raise. Why this does not happen I leave open for later investigation, but perhaps it is related to areal features—see, for example, Stilo (2005).

position of each successive FP. (43) below shows the step-by-step derivation of the

constructions *kitêb-a kurdî ya mirov* and *kitêb-a mirov ya kurdî*, both meaning 'the

man's Kurdish book' in Kurdish (cf. Persian: *ketāb-e kordi-ye mard*, book-EZ

kurdish-EZ man).

(43)

i.		kitêb	*(Merge EZ)*
ii.		a kitêb	*(Merge kurdî)*
iii.		kurdî a kitêb	*(Merge F₁, Move EZ)*
iv.		a kurdî t_{EZ1} kitêb	*(Move kitêb to Spec,FP₁)*
v.		kitêb a kurdî t_{EZ1} t_{NP}	*(Merge Ez₂)*
vi.		a kitêb a kurdi t_{EZ1} t_{NP}	*(Merge mirov)*
vii.	mirov a	kitêb a kurdî t_{EZ1} t_{NP}	*(Merge F₂, Move EZ₂)*
viii.	a mirov t_{EZ2}	kitêb a kurdî t_{EZ1} t_{NP}	*(Move either FP₁ or kitêb to Spec,FP₂)*
ix.			

a. [$_{FP2}$ [$_{FP1}$ *kitêb a kurdî* t_{EZ1} t_{NP}] ya mirov t_{EZ2} t_{FP1}]

or

b. [$_{FP2}$ *kitêb* a mirov [$_{FP1}$ t_{EZ2} t_{NP} ya kurdî t_{EZ1} *t_{NP}*]]

Thus the derivation for both constructions is the same until the final step, where

Kurdish has the option either to roll up the entire FP (*kitêb a kurdî*), or to move the

head noun (*kitêb*) alone. Either option results in the change of the second Ezafe to

ya, perhaps because the Ezafe cannot cliticize to an unpronounced element or a

trace, and must thus appear in the independent form. Why Persian only allows pied-

piping is unclear, but it may be related to the strong morphological agreement in

Kurdish.

3.2   What is Ezafe?

In my analysis, Ezafe is no longer an element that allows [+N] modifiers to remain *in situ*, nor is it the phonetic realization of syntactic movement. It is rather the head of a generalized modifier construct, summarized as follows:

(44) Ezafe (Final Version)

The Ezafe is a projection with two heads:

*(a) an Ez^0 head, which agrees with its complement, the modified NP of the Ezafe construction, through a **non-Case-assigning AGREE operation**, and*

(b) an F^0 head, which might assign Case to the modifier in Spec,EzP in some languages, and which has an EPP feature

As mentioned above, in languages like Baluchi, Ezafe might represent different projections corresponding to different kinds of modification, e.g., adjectival vs. non-adjectival, etc. This will certainly make an interesting course of study for further research on Baluchi and languages like it.

3.3   Ezafe and Case: an Open Question

Carstens argues that in languages like Swahili, F is not a Case-assigner, and derives her structure for the associative marker without once allowing F to enter into a potential Probe-Goal relation with the modifier in Spec,nP (or SpecEzP in my analysis), thus preventing Case-assignment. I, however, propose that F^0 might still check Case in some Ezafe languages, most importantly because allowing F^0 to check Case can explain the limited distribution of Ezafe in Persian, Gilaki, and Baluchi. Recall that Larson & Yamakido (2005), following Samiian (1983, 1994), claim that

all nouns, adjectives, denominal prepositions, and non-finite RCs/CPs, as well as denominal prepositions, are [+N] categories, and that Ezafe can only appear between two [+N] elements. While this generalization is a stipulation, it also neatly explains the distribution of Ezafe in these languages.
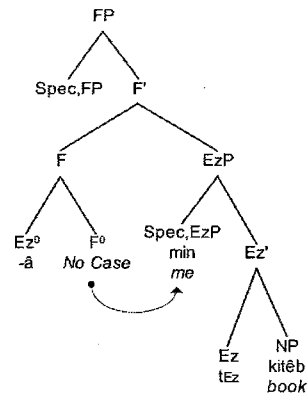
If, building on this assumption, we allow F^0 to assign Case in the languages where the distribution of Ezafe is limited, then the elements that can appear in Spec,EzP are constrained to only those which can bear Case: that is, *only [+N] categories.* In languages like Kurdish, on the other hand, where Ezafe can appear before any modifier, F^0 presumably does not assign Case.

Figure 9: *Agreement between F^0 and the [+N] modifier (possessor)*

(a) F^0 assigns Case in Persian   *(b) F^0 does not assign Case in Kurdish*
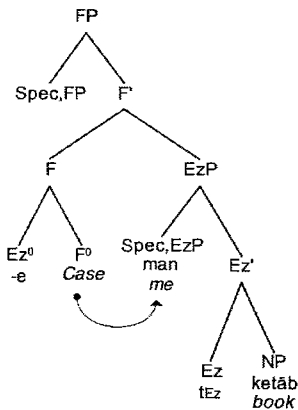
```
        FP                                      FP
       /  \                                    /  \
   Spec,FP  F'                             Spec,FP  F'
           /  \                                    /  \
          F    EzP                                F    EzP
         / \   /  \                              / \   /  \
      Ez⁰  F⁰ Spec,EzP Ez'                    Ez⁰  F⁰ Spec,EzP Ez'
      -e  Case  man    |                      -â  No Case min   |
                me    / \                               me     / \
                     Ez  NP                                   Ez  NP
                     tEz ketāb                                tEz kitêb
                         book                                     book
```

Notice that the only language with a freer distribution of Ezafe (Kurdish) is also the only language that I propose does not assign Case, and also the only language with overt agreement. In any case, although it is interesting to speculate as to the exact nature of Case-assignment and Ezafe, further work is needed to understand the nature of both the projection F(P) and Case-assignment in Ezafe languages. For now,

I leave open the question of Case-assignment, and acknowledge that the theoretical basis for the distribution of Ezafe in Iranian languages remains to be understood.

4 *Summary and Further Issues*

After presenting the various patterns of Ezafe in the Western Iranian languages, I examined a number of proposals for Ezafe and Reverse Ezafe. In particular, I focused on the Case-assigner analyses of Larson & Yamakido (2005) and Larson (2009), and showed that they cannot account for the agreement patterns of Kurdish. Next, I discussed the analysis of Kahnemuyipour (2006), who claims that Ezafe is the overt morphological realization of syntactic movement. This analysis has several weaknesses of its own, most notable of which are its inability to explain agreement in Kurdish and the distribution of Ezafe in Persian, Gilaki, and Baluchi. Finally, I examined a proposal by Carstens (2001) for Swahili, whose associative marker patterns very similarly to Ezafe.

Drawing on this account and Kahnemuyipour's in particular, and adopting elements from Larson & Yamakido (2005), I arrived at a structure that explains both the agreement features and the word order of Ezafe across languages, and which may additionally explain the limitations of Ezafe with certain modifiers based on a Case-assigning approach. While there remains much work to be done on Ezafe, I believe that this account might shed some light on the peculiarities of the construction, and perhaps help lay the foundation for a more comprehensive analysis of nominal modification in all Iranian languages—and beyond.

Indeed, Ezafe-type constructions are not limited to Western Iranian languages. Recall that we seen three general types of Ezafe: a) the Persian Ezafe, which is morphologically invariable, and head-initial; b) the Gilaki and Baluchi Ezafe(s), which are also morphologically invariable, and head-final; and c) the Kurdish Ezafe, which shows morphological feature agreement, and is head-initial. We would thus expect to also see a fourth type of Ezafe, which has both feature agreement, and head-final directionality. Such a construction is unfortunately not present in the Western Iranian language family—but it is in Hindi and other modern Indo-Aryan languages. The Hindi possessive construction resembles that of Gilaki and Baluchi, but shows both ɸ-feature agreement on the possessive marker and oblique case morphology on the possessor, much like Kurdish:

(45) a. laɾkē   **-kā**   nām
         boy(m).OBL-**POSS.MAS** name (m)
         'the boy's name'

    b. laɾkē   **-kī**   mã:
        boy(m).OBL-**POSS.MAS** mother (f)
        'the boy's mother'

Like the Bantu associative marker, the Hindi possessive marker is only used to show noun-noun relationships. While Hindi is not strictly an 'Ezafe' language, it is remarkable to note the strong similarities between Ezafe and constructions like in Hindi or the Bantu languages. Indeed, it is likely that Ezafe is just one example of a very common means of showing modification in the world's languages. It is my hope that this paper has at the very least provided a point of departure for further investigation into these constructions.

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