THE TWO FACES OF A NOMINAL LINKER:
ANOTHER LOOK AT REVERSE EZAFE IN GILAKI[*]

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This paper examines the nominal linker (known as Reverse Ezafe) in the Caspian language Gilaki.[1] We argue that the nominal linker in Gilaki is in fact the realization of two different morphosyntactic elements. We also highlight the differences between Reverse Ezafe and Ezafe, found in Persian and other Iranian languages. This study has implications for the typology of nominal linkers, leading to the conclusion that superficially similar linking elements, both within a language and across languages, may in fact have different syntactic properties and as such should be analyzed as distinct phenomena.[2]

1.   Introduction

In Eshkevarat Gilaki (hereafter EG), a linking element known as 'Reverse Ezafe' (hereafter REZ) appears between a noun and some prenominal modifiers. At first sight, this element looks very similar to Ezafe, the linking element that appears between the noun and its postnominal modifiers in many other Iranian languages such as Persian. Here, we compare REZ in EG and Persian Ezafe and argue that these two elements should be characterized differently in spite of their apparent similarity. We further argue that REZ in EG is in fact the realization of two different morphosyntactic elements. In section 2, we give an overview of Persian Ezafe and our typological predictions regarding the distribution of nominal linkers. We also describe the distribution of Reverse Ezafe in Eshkevarat Gilaki. In section 3, based on some phonological and morphosyntactic properties, we establish the difference between Reverse Ezafe in EG and Ezafe in Persian. In this section, we also argue that what is known as Reverse Ezafe has a dual function and hence represents two morphosyntactic elements. We provide data from other languages supporting this proposal. In section 4, we investigate the nature of Reverse Ezafe in EG while considering cross-linguistic data. Section 5 discusses the implications for the typology of nominal linkers and concludes the paper.

[1] The dialect under investigation here is Eshkevarat Gilaki, spoken in a number of towns and villages in the eastern part of Guilan province of Iran.

[2] The first and third authors are native speakers of Persian and the second author is a bilingual speaker of EG and Persian.

2. Overview and predictions

2.1 Persian Ezafe

In Persian, like many other Iranian languages, a linking element known as 'Ezafe' (hereafter EZ) appears between a noun and its postnominal modifier (N-EZ Mod), and is repeated on subsequent modifiers, if they are present, except the last one (N-EZ Mod_1-EZ Mod_2-EZ Mod_3), as in (1). (1a) shows an attributive noun; (1b) an adjective; (1c) shows iterativity; (1d) a possessor, and (1e) an Ezafe appearing on a nominal P(reposition). As it is well established in the literature on Persian syntax (Samiian 1994, Karimi and Brame 1986, Ghomeshi 1997, Kahnemuyipour 2014, among others), Ps are divided into two main classes, nominal Ps (1e) which take the Ezafe marker, and true Ps which do not (1f).

(1)   Presence of Ezafe with post-nominal modifiers

a.	(ye)	kif-e	čarm	b.	(ye)	mard-e	čāq
	a	bag-EZ	leather		a	man-EZ	fat
	'a/the leather bag'				'a/the fat man'		

c.	sag-e qahveyi-ye	gonde	d.	ketāb-e	ali/man	
	dog-EZ brown-EZ	big		book-EZ	Ali/I	
	'big brown dog'			'Ali's/my book'		

e.	pošt-e	dar	f.	az	tehrān
	behind-EZ	door		from	Tehran
	'behind the door'			'from Tehran'	

EZ only appears with post-nominal modifiers. It never appears on a bare noun or on pre-nominal elements.

(2)   Absence of Ezafe with bare nouns or pre-nominal modifiers

a.	ketāb-(*e)		b.	do (tā) – (*e)	ketāb
	book-EZ			two CL-EZ	book
				'two books'	

c.	in-(*e)	ketāb	d.	har/hič-(*e)	ketāb-(i)
	this-EZ	book		each/no-EZ	book-INDEF

When there is a combination of pre-nominal and post-nominal modifiers, the contrast with respect to the appearance of Ezafe is evident (3).

(3)   Combination of pre-nominal and post-nominal modifiers

        in   do   ketāb-e   qatur-e   jāleb
        this   two   book-EZ   thick-EZ   interesting
        'these two interesting thick books'

2.2   Typological predictions

There is a clear correlation between the presence of Persian Ezafe and the order of nominal elements. The noun marks a clear boundary for the Ezafe marker: all elements preceding it lack the Ezafe, while the noun itself and all elements following it (except the final one) are marked with the Ezafe. The schemas in (4) illustrate the correlation between the Ezafe and the order of nominal elements.

(4)   **Correlation between the Ezafe and order of nominal elements**

        a.   N-Ez   Mod   Most common: Fully productive syntactically

        b.   Mod   N   Prenom. modifier

        c.   N   Mod   Limited to some compounds (not discussed here)

        d.   *Mod-Ez   N   Gap in Persian (apparently filled by EG)

        Kahnemuyipour (2014) builds on the asymmetry in (4) and develops a roll-up analysis of Persian Ezafe, according to which the noun phrase is head final in a strictly right branching structure, with adjectives in specifier positions of functional projections above the noun and the NP rolling up around the adjectives. Numerals and demonstratives are heads, higher in the structure, and not involved in the roll-up movement. The generalization in (4d) is crucial here. If Ezafe is the result of roll-up movement in a right-branching structure, then one should not find it on prenominal modifiers.

2.3   Reverse Ezafe in Eshkevarat Gilaki (EG)

Caspian languages, represented here by EG, appear to question the gap in (4d), as attributive adjectives and possessors are prenominal and yet require a nominal linker. This linker has been referred to as Reverse Ezafe (hereafter REZ) due to the reverse order of adjectives/possessors and nouns compared to an EZ language like Persian. In addition, most Ps are also postpositional with the noun complement taking REZ.[3] Examples are given in (5).

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[3] There are a few Ps that are prepositional and behave like Persian prepositions, taking EZ on the P itself, e.g. qabl 'before', ba'd 'after'.

(5)   a.   zərd-ə   čərm-ə   kif   (modification)
                yellow-REZ   leather-REZ   bag
                '(a) yellow leather bag'

       b.   hasən-ə   zərd-ə   čərm-ə   kif   (possession)
                Hasan-REZ   yellow-REZ   leather-REZ   bag
                'Hasan's yellow leather bag'

       c.   dər-ə   pušt   (PP)
                door-REZ   behind
                'behind the door'

Meanwhile, similar to Persian, EG demonstratives and numerals are prenominal and do not take REZ (6).

(6)   i   šiš   tə   səbz-ə   dəftər
        this   six   CL   green-REZ   notebook
        'these six green notebooks'

It is important to note first that EG is not a true mirror image of Persian, as that would be a language with a mixture of prenominal and post-nominal modifiers, with only prenominal ones taking a linker. We see in (6) that elements such as numeral and demonstratives which are prenominal in Persian and do not take EZ are also prenominal in EG and lack REZ. A true mirror image of Persian would be a language which would have these elements as postnominal. We are yet to come across such a language among languages with linkers. That still leaves us with the question of what REZ is. Is it an element just like EZ, only appearing in the reverse order? Does it have a different morphosyntax? In the remainder of the paper, we will argue that REZ has properties which clearly distinguish it from EZ and also show that what is known as REZ is in fact the realization of two distinct morphosyntactic elements.

3   Reverse Ezafe vs. Ezafe

3.1   REZ ≠ EZ; REZ1 ≠ REZ2

We noted above that Persian prepositions are divided into two main classes: true and nominal Ps. This division is based on certain syntactic properties. For example, nominal (but not true) Ps can be pluralized (7a), case marked or appear with demonstratives (7b) (Samiian 1994).

(7)   a.   zir-ā /   pošt-ā / tu-ā / *az-ā / *dar-ā
             under-PL   behind-PL in-PL   from-PL   in-PL

       b.   un zir/tu/pošt-(r)o   did-am. / *in/un   dar-o did-am.
             that under/in/behind-ACC see.PST-1SG   this/that in-ACC see.PST-1SG
             'I saw the underneath/inside/behind.'

EG Ps exhibit the same behaviour with respect to their nominal vs. true adpositional status (8).

(8)   a.   bun-ən   /   pušt-ən   / men-ən / *ji-ən / *hamra-ən
             under-PL   behind-PL   in-PL   from-PL   with-PL

       b.   u   bun/men/pušt-ə   be-d-em.
             that under/in/behind-ACC PST-see-1SG
             'I saw the underneath/inside/behind.'

Crucially, unlike Persian in which only nominal Ps take EZ (9), in EG, noun complements of both nominal and true Ps take REZ (10).

(9)   a.   zir-*(e)   miz (nominal P)   b.   az-(*e)   hasan (true P)
             under-EZ   table   from-EZ   Hasan
             'under the table'   'from Hasan'

(10) a.   miz-*(ə)   bun (nominal P)   b.   hasən-*(ə)   ji (true P)
            table-REZ   under   Hasan-REZ   from
            'under the table'   'from Hasan'

The facts in (9) and (10) are important in the context of Larson's (2009, 2019) analysis of REZ as a "concordializer", an element that is attached to [+N] categories such as Adjs to allow case concord with another nominal element such as N. This makes the prediction that only nominal Ps in EG require REZ on the preceding complement, in a similar fashion to Persian where only nominal Ps require Ezafe. We showed in (10) that REZ is required regardless of the nominal status of P.[4]

In fact, a closer look at the EG data reveals a distinction between two types of REZ. One type (REZ$_1$) appears in the context of possessives and PPs. The second type (REZ$_2$) appears on Adjs. There are three systematic differences between REZ$_1$ and REZ$_2$, which we lay out below.

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[4] Larson attributes the presence of EZ and REZ in Iranian languages to the nominal status of their adjectives. In a language like Persian, with post-nominal modifiers, he suggests that EZ is a case marker and that all [+N] elements need case. While D assigns case to N, EZ is inserted to assign case to the [+N] adjective (see Kahnemuyipour 2014 for arguments against a case analysis of EZ). Under this view, in REZ languages, the "nominal" status of adjectives leads to their needing a concordializing element (namely REZ) to allow case Concord throughout the DP.

First, while REZ₂ is part of the phonological word of the element it attaches to and as such is stressed, REZ₁ is always unstressed (11), where stress is marked in **bold**. Note that in Persian, Ezafe is consistently unstressed, as any other clitic or inflectional affix.[5] In this respect, EG REZ₂ behaves like a derivational affix.[6]

(11)   a.   čərm-**ə**   kif
                leather-REZ   bag
                'a leather bag'

           b.   has**ən**-ə   xonə
                Hasan-REZ   house
                'Hasan's house'

           c.   div**ār**-ə   sər
                wall-REZ   on
                'on the wall'

Second, while the phonological realization of REZ₂ is conditioned by the form of the base it attaches to (in clear contrast to Persian Ezafe), REZ₁ is realized invariantly. This distinction is dependent on the syllable structure of the base. REZ₂ obligatorily appears on one-syllable adjectives (12), but it is banned on many disyllabic adjectives (13), and is entirely banned on multisyllabic adjectives (14). REZ₁ does not show this sensitivity to syllable structure. As shown in (15a) and (15b), REZ₁ obligatorily appears on multisyllabic nouns in a PP and a possessive DP, respectively.

(12)   a.   čərm*(-ə)   kif-ən   b.   čāq*(-ə)   asb-ən
                leather-REZ   bag-PL   fat-REZ   horse-PL
                'leather bags'   'fat horses'

(13)   a.   xujur (-*ə)   māšin   b.   xušhal(-*ə)   vəčə
                good-REZ   car   happy-REZ   child
                '(a) good car'   'a happy child'

           c.   ye   tə   sifid(-ə)   čərm-ə   goron(-ə)   kif
                one   CL   white-REZ   leather-REZ   expensive-REZ bag
                'one white leather cheap bag'

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[5] For more details on the prosodic behaviour of affixes and clitics in Persian, see Kahnemuyipour (2018).

[6] In Persian (and many other Iranian languages), lexical stress is on the final syllable. Meanwhile, there is a distinction between suffixes which receive stress and those that do not. Typically, derivational suffixes are part of the phonological word and receive stress, while inflectional affixes do not (see Kahnemuyipour 2018). EG seems to behave like Persian in this respect.

(14) a. bā-nəzākət (-*ə) ādəm
           with-politeness-REZ person
           'a polite person'

      b. bā-marəfət(-*ə) ādəm
           with-wisdom-REZ person
           'a wise person'

(15) a. emtəhān-ə mən   b. arsəlān-ə kitāb
           exam-REZ in   Arsalan-rez book
           'in the exam'   'Arsalan's book'

Third, in ellipsis contexts where the head noun is elided, REZ$_1$ remains on the stranded modifier (16), while REZ$_2$ cannot (17). (Note: when there is a gap after REZ$_1$, it appears as [i] instead of a schwa.)

(16) mu məryəm-ə xudkār-ə vigit-em na hasən*(-i)
       I Maryam-REZ pen-ACC get.PST-1SG not Hasan-REZ
       'I got Maryam's pen, not Hasan's'

(17) surx-ə xudkār bə-kət na səbz(-*ə).
       red-REZ pen PST-fall not green-REZ
       'The red pen fell down, not the green (pen)'

The facts in (16)-(17) is reminiscent of Watanabe's (2010) work on Japanese, who uses similar ellipsis facts to argue for the dual status of the –*no* marker which appears on a possessor or a numeral-classifier sequence. While in the possessor context, it can be stranded in ellipsis (18), with numeral-classifiers, it cannot (19). He treats the numeral-classifier -*no* as a linking element that requires an overt N to follow it for it to be inserted morphologically and takes the other –*no* to be a genitive marker.

(18) [Rooma-**no** hakai]-wa   [Kyooto-**no** *e*] -yorimo   hisan   datta.
       Rome -*no* destruction-TOP Kyoto-*no* -than   horrible was
       'Rome's destruction was more horrible than Kyoto's'
       (adapted from Watanabe 2010: 67)

(19) Taroo-wa   [san-satsu-**no** hon]-o katta   ga,   Hanako-wa
       Taroo-TOP   three-CL-*no* book-ACC bought   though   Hanako-TOP
       go-satsu **(*-no)**   katta.
       five-CL   bought
       'Taroo bought three books, but Hanako bought five.'
       (adapted from Watanabe 2010: 64)

With these facts we turn to further cross-linguistic data providing support for the proposed dual function of REZ.

3.2 Cross-linguistic support for the dual nature of REZ

Another Caspian language Taleshi exhibits a very similar distribution for REZ, with the striking difference that the two types of REZ we have identified as REZ₁ and REZ₂ have distinct phonological realizations as –*i* and –*a*, respectively. Some examples are given below.

(20) a. hasən-i kā   b. hasən-i kitāb
         Hassan-REZ from   Hassan-REZ book
         'from Hassan'   'Hassan's book'

     c. bāhuš-a xərdən
        intelligent-REZ child
        'The intelligent child'

Similarly, in Balochi (Northwestern Iranian), another REZ language, there is a phonological distinction between the REZ used on possessors and complements of P (our REZ₁, realized as -*ay*) and the one used on adjectives (our REZ₂, realized as - *ēn*), as shown in (21) (from Jahani and Korn 2009).[7]

(21) a. mnī brās-**ay** kitāb   b. gis-**ay** puštā
         I.GEN brother-GEN book   house-GEN behind
         'my brother's book(s)'   'behind the house'

     c. mazan-**ēn** asp
        big-ATTR horse
        'big horse(s)'

Turning to a genealogically unrelated language, Japanese, we see that attributive adjectives are marked with –*na/-i* (depending on adjective class, true versus nominal) (22)[8], which is distinct from the genitive marker –*no* used on possessors (23) (Larson and

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[7] There appears to be variation with respect to the distinctive phonological forms of REZ among Balochi dialects. We are abstracting away from such variations here and leave a closer examination for future research. Also, REZ forms appear to reflect number distinctions not shown here.

[8] The question marks in example (22) are directly taken from Larson and Yamakido (2008), indicating the unclear contribution of this morpheme.

Yamakido 2008). We saw above that –*no* may itself have two distinct functions (Watanabe 2012).[9]

(22) a. utukusi-i   tori   b. taka-i   hon
          beautiful-?   bird   expensive-?   book
          'beautiful bird'   'expensive book'

      c. kiree-na   uti   d. sizuka-na   umi
          clean-?   House   quiet-?   sea
          'clean, tidy house'   'quiet sea'

(23) a. Taroo-no   kyoodai   b. Taroo-no   hon
          Taroo-GEN   sibling   Taroo-GEN   book
          'Taroo's siblings'   'Taroo's book'

4   What are REZ₁ and REZ₂?

We have argued above that what is known as REZ in EG is in fact the realization of two different morphosyntactic elements. This raises a question about the nature of these elements. In this section, we share some tentative ideas in this regard. REZ_1 can most straightforwardly be analyzed as a genitive case marker, as it is used to mark possessors (see above examples from EG, Balochi and Taleshi). Under this view, we can take postpositions in these languages as assigning genitive case (see Haig 2019). Support for this proposal comes from possessive pronouns being used as pronominal complements of P (24).

(24) a. mi   kitāb   b. mi   ji
          my   book   my   from
          'my book'   'from me'

Meanwhile, additional facts from EG involving PP modifiers may undermine a simple identification of REZ_1 as a genitive case marker. In (25), we can see the presence of REZ_1 (in bold) on the prenominal PP modifying the noun phrase. Note that this linker is unstressed and hence an occurrence of REZ_1.

(25) [divār-ə   sər]-**ə**   təxtə
      wall-REZ   on-REZ   board
      'the board on the wall'

It is even more clear from Taleshi data that the form used in this context is REZ_1 (26), as REZ_1 and REZ_2 have different forms in the language, with REZ_1 appearing as –*i*.

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[9] We have provided a simplified distribution of –*no*, which does not appear to be a straightforward genitive marker. Our focus here is the distinction between linking elements that appear on adjectives and those that appear elsewhere in a noun phrase.

(26) [miz-i   bun]-**i**   sim
     table-REZ   under-REZ   wire
     'the wire under the table'

This is reminiscent of Hindi/Urdu –KA (Mahoon 2019), which, like REZ$_1$, is used as a genitive marker, as well as on NP complements of P and on PP modifiers, as in (27), adapted from Mahoon (2019). It is worth noting that –KA has also been analyzed as a genitive marker (Butt and King 2004, cf. Mahoon 2019).

(27) a. Pakistan   ki   hakumat
         Pakistan   KA.F   government
         'Pakistan's government'

     b. [[[us   kitab]   ke]   uper]
          that   book.M   KA.OBL   on.top
         'on that book'

     c. [panch sal tak] ka   bachpan
         five   year until KA.M   childhood
         'the childhood of up to five-years-old'

Interestingly, Hindi/Urdu does not have a linker on adjectives. If, as we have suggested in this paper, REZ$_1$ and REZ$_2$ should be analyzed as distinct morphosyntactic elements, the expectation is that some languages may have one but not the other. In this context, Hindi/Urdu can be seen as a language which has REZ$_1$ but not REZ$_2$. We leave a fuller account of the syntax of REZ$_1$ for future research.

We now turn to REZ$_2$. We have shown above that REZ$_2$ is an element that appears on attributive adjectives (or nouns) and has three properties: 1. It behaves like a cohering affix and receives stress; 2. Its morphological realization is conditioned by the number of syllables of the base it attaches to; 3. It cannot be realized unless followed by an overt noun, which can be attributed to the phonological conditions this element can be realized in (akin to Watanabe's 2010 analysis of the numeral-classifier –*no*).

We are still left with the question of what REZ$_2$ is. One possible candidate may be what is known as the JOIN operator (see Baker 2003, Truswell 2004, Belk 2017), which takes a predicative adjective and type shifts it into an attributive one. This proposed operator does not typically have a morphological realization in other languages. Under this view, REZ$_2$ in EG (and the other similar languages discussed above) can be seen as the morphological realization of this operator.[10] We leave a closer examination of a possible JOIN analysis of REZ$_2$ to future research. We need to investigate whether other

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[10] We are grateful to Zoe Belk for a discussion of the JOIN operator and its possible connection to nominal linkers.

languages across the world may have such morphological realizations of the JOIN operator. Are there languages which only have REZ_2 and not REZ_1 (in a parallel fashion to Hindi/Urdu which arguably has REZ_1 but not REZ_2)? Are such realizations of the JOIN operator ever found in Ezafe languages? If not, why not?

5.   Conclusion

We have argued that the nominal linker in EG is in fact the realization of two different morphosyntactic elements. These elements have distinct properties, and as we have seen in the cross-linguistic data above, sometimes even different forms. In making our case for the reclassification of the EG nominal linker into two morphosyntactic elements, we have also highlighted the differences between Reverse Ezafe and Ezafe. We have provided some speculations on what morphosyntactic elements REZ_1 and REZ_2 may represent.

This study has implications for our typological understanding of nominal linkers. We have seen that elements which look alike, such as EZ and REZ, may in fact have different syntactic properties and as such should be analyzed as distinct. Meanwhile, by looking at diverse languages such as EG, Taleshi and Balochi, and even genealogically unrelated languages such as Hindi/Urdu or Japanese, we may find elements which exhibit similar morphosyntactic behaviour, rendering a unified analysis of these elements plausible.

Ultimately, we may conclude that what is known as nominal linkers is not a unified phenomenon. Before drawing strong conclusions, we need a careful crosslinguistic examination to identify the syntactic behaviour of these apparently similar elements.

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