

EZAFE ACROSS LANGUAGE FAMILIES: IRANIAN AND ALTAIC

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Introduction & Aim

- This paper aims to analyze the constructions involving the Ezafe marker in an Iranian and an Altaic language, namely, Kurmanji Kurdish and Turkish, to argue for a common ground between the two languages as well as differences.
- We will extend the analysis for pronouns by Déchaine & Wiltschko (2010) to the nominal structures formed with Ezafe marker in both languages.
- More specifically, we argue that compounds are ϕ Ps while possessive constructions are DPs.
- Our analysis will show that Kurmanji and Turkish display many similarities in constructions involving the Ezafe marker, as well as some differences.
- We hope to show that Ezafe is a crucial part of nominals in both languages and that the marker is not restricted to Iranian languages.

N-N Compounds	Possessive (Genitive) Structures	Further than DPs	Ezafe in ‘Further than DPs’
Kurmanji: ϕ P Turkish: ϕ P	Kurmanji: DP Turkish: DP	Kurmanji: Adjective Late-Merge?	Kurmanji: Yes

Table 1: Summary of the Main Properties of Data

1. DATA

- The ezafe marker in Kurmanji relates post-nominal modifiers to a head noun, and it inflects for gender, number and definiteness as indicated in the table below (Haig 2011, Thackston 2006, Bedirxan & Lescot 1970):

SINGULAR				PLURAL	
Feminine (singular)		Masculine (singular)			
Definite	Indefinite	Definite	Indefinite	Definite	Indefinite
-a	(-ek)-e	ê	(-ek)-î	-ên	-ine

Table-2: Forms of Ezafe marker in Kurmanji

- Turkish ezafe is lesser known, mainly due to its misperception as the 3rd person marker (Kornfilt 1984, Yüksek 1998, Tat 2010; but see Lewis 1967 for reference to ezafe constructions in Turkish).
- Turkish ezafe only appears in Noun+Noun structures where the second noun is head.
- It has a fixed form, -(s)I in the sense that it does not inflect for gender, number or definiteness. However, it is subject to some phonological harmony processes. When the preceding stem ends in a consonant, the initial [s] is not realized. The vowel undergoes frontness-backness and rounding harmony with the preceding vowel.
- In both languages, ezafe marker forms compounds (1):

(1) a.	nan-ê	tendûr-ê	(<i>Kurmanji</i>)	b.	tandır	ekmeğ-i	(<i>Turkish</i>)
	bread-EZ.M	tandoori-OBL			tandoori	bread-EZ	
	‘nan / village bread’				‘nan / village bread’		

- Note that the head noun is to the left in Kurmanji and to the right in Turkish.
- Also note that ezafe attaches to the head noun in both languages, but due to the head-directionality parameter, it ends up between the head and the non-head noun in Kurmanji while it ends up at the end in Turkish.
- Ezafe also forms possessor-possessee structures in both languages (2) and (3):
(Most Kurmanji examples are from Haig 2011)

(2) a.	heval-ên	keçk-ê	(<i>Kurmanji</i>)	b.	kız-in	arkadaş+i+Ø	(<i>Turkish</i>)
	friend.EZ.PL	girl-OBL			girl-3S.GEN	friend-EZ.+3S	
	‘the friends of the girl’				‘the friend of the girl’		

(3) a.	dest-ê	te	(<i>Kurmanji</i>)	b.	sen-in	el+i+n	(<i>Turkish</i>)
	hand-EZ.M	2SG.OBL			you-2S.GEN	hand-EZ.+1S	
	‘your hand’				‘your hand’		

- Moreover, Kurmanji ezafe forms adjectival modification (4) while Turkish does not allow ezafe in adjectival modification cases as shown in (5):

(4)	mal-a	mezin	(<i>Kurmanji</i>)
	house-EZ.F	big	
	‘big house’		

(5) a. Kadın doktor-*(u) (*Turkish*)
 woman doctor-*(EZ)
 ‘gynecologist’

b. Kadın doktor-(*u)
 woman doctor-(*EZ)
 ‘female doctor’

- Kurmanji ezafe relates head noun to PPs (6) and relative clauses (7). Turkish does not.

(6) zîlam-ê li ber derî (*Kurmanji*)
 man-EZ.M in front of door.OBL
 ‘The man in front of the door’

(7) çîrok-a [ku wî ji min re got] (*Kurmanji*)
 story-EZ.F [that 3S.OBL ADP 1S.OBL ADP say.PST.3S]
 ‘The story [that he told me]’

- Here is a summary of the data so far:

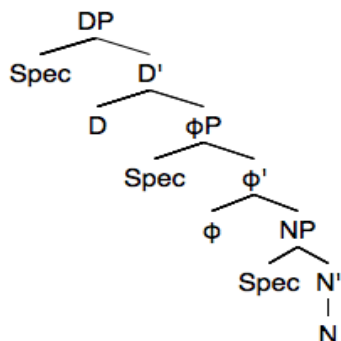
	Compounds	Possessives	Adjectival Modification	PPs	Relative Clauses
Kurmanji	✓	✓	✓	✓	✓
Turkish	✓	✓	✗	✗	✗

Table 3: Summary of Data

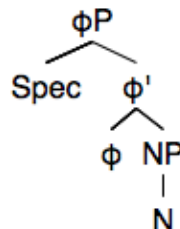
2. PROPOSAL

- Extending the analysis for pronouns by Déchaine & Wiltschko (2010) to nominal phrases with some modifications, we argue that both Kurmanji and Turkish have the three nominal structures in (8).

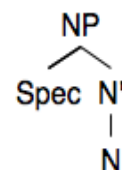
(8) a. [DP [D] [ϕ P [ϕ] [NP N]]]



b. [ϕ P [ϕ] [NP N]]



c. [NP N]



- Déchaine & Wiltschko (2010) argue that there are three types of pronouns: pro-DP, pro- ϕ P and pro-NP, whose internal structures are given in (8) in respective order. ϕ P in Déchaine & Wiltschko (2010) is “simply spell out ϕ -features (p. 411)” and it is “a cover term for any intermediate functional projection intervening between N and D (p. 410)”.
- They propose that the differences in the internal structures of pronouns lead to their distributional (binding) differences.
- We will extend their analysis to the nominal structures formed with ezafe marker in both languages.¹ More specifically, we argue that compounds are ϕ Ps while possessive constructions are DPs.
- Now, we look at each structure in turn.

2.1. ϕ P

- ϕ Ps display variable-like behavior according to Déchaine & Wiltschko (2010) and the following data show that both Kurmanji as in (9) and Turkish as in (10) have ϕ P ezafe:²

(9) nanê tendûr-ê heye (*Kurmanji*)
 bread-EZ.M tandoori-OBL exist.PRS.SG
 ‘There is nan/village bread.’
 ‘*The tandoori has a nan/ bread.’

(10) tandır ekmeğ-i var (*Turkish*)
 tandoori bread-EZ exist
 ‘There is nan/village bread.’
 ‘*The tandoori has a nan/ bread.’

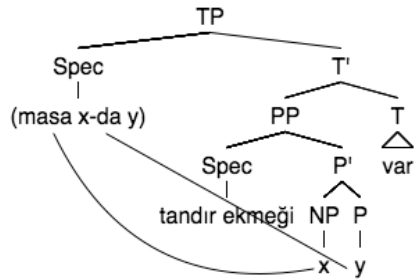
- Based on Freeze (1992)’s argument of existentials, the following is the structure of (10) (also extending to (9)):

(11) a. li ser masê nanê tendûr-ê heye (*Kurmanji*)
 P on table-OBL bread-EZ.M tandoori-OBL exist.PRS.SG
 ‘There is nan/village bread on the table.’

b. masa-da tandır ekmeğ-i var (*Turkish*)
 table-LOC tandoori bread-EZ exist
 ‘There is nan/village bread on the table’

¹ We will leave out bare nominals from our analysis as they are simple NPs. We will focus on DP (8a) and ϕ P (8b).

² The possession meanings marked as ungrammatical in (9) and (10) will be crucial when we start dealing with DP.



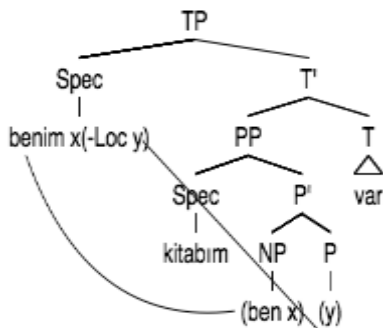
- As tree shows, the subject ends up within the scope of the operator introduced by the existential verb, explaining the variable-like behavior of compounds in existentials.

2.2. DP

- According to Freeze (1992), specific subjects cannot be in the scope of existential verbs.
- This predicts that DP subjects cannot be in the scope of the existential verb, which is why possessive structures cannot be interpreted existentially in the absence of an overt location or some other external overriding factor.

(12) a. kitaba min heye (*Kurmanji*)
 book-EZ.F 1S.OBL exist.PRS.SG
 ‘I have a book.’
 ‘? There is a book of mine.’

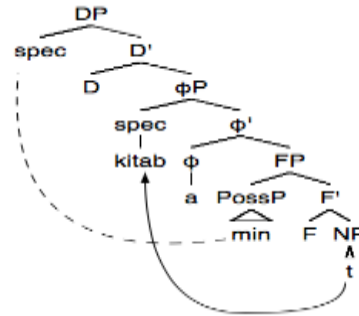
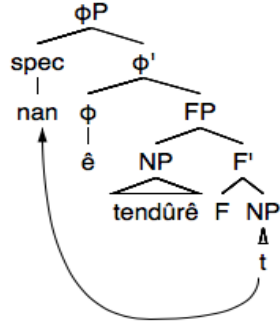
b. ben-im kitab-ı+m var (*Turkish*)
 I-1S.GEN book-EZ+1S exist
 ‘I have a book’
 ‘? There is a book of mine.’



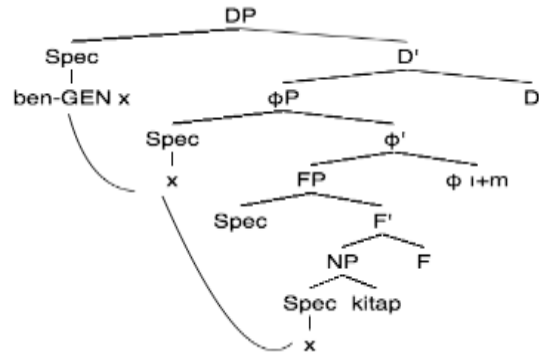
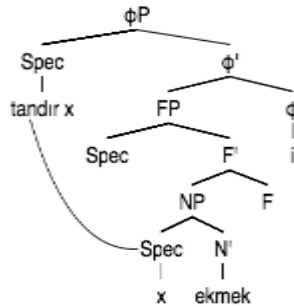
- The existential operator test indicate that compounds and possessives have different internal structure in both Kurmanji and Turkish such that compounds are ϕ Ps while possessive constructions are DPs in both languages.

- In (13) and (14), there are the syntactic trees we are suggesting for Kurmanji and Turkish compounds and possessives, respectively.

(13) a. **Kurmanji:** *nan-ê tendûre* ‘nan/village bread’ b. **Kurmanji:** *kitab-a min* ‘my book’



(14) a. **Turkish:** *tandır ekmeğ-i* ‘nan/village bread’ b. **Turkish:** *ben-im kitab-ı+m* ‘my book



- In line with Kaynemuyipour (2014) and Atlamaz (2015), we assume the existence of intermediate projections (FP) throughout the derivation.
- In fact, Turkish provides evidence for an FP projection between ϕP and NP. When there is a plural marker in a compound, it always comes before the ezafe marker. Therefore, it looks like FP_{plural} precedes ϕP , which hosts ezafe (15):

- (15) a. öğretmen ev-i
 teacher house-EZ
 ‘teacher house (a house for teachers)’
- b. öğretmen ev-ler-i
 teacher house-PL-EZ
 ‘teacher houses (houses for teachers)’
- c. *öğretmen ev-i-ler
 teacher house-EZ-PL

3. EZAFE IN TURKISH

- Turkish is not generally regarded to have an Ezafe marker.
- However, Lewis (1967:41) refers to compounds in Turkish as *the indefinite izafet* and to possessives as *the definite izafet*.
- We suggested that the –(s)I marker in compounds as well as the first vowel of the agreement morpheme on the head noun in possessives are ezafe markers (the latter is fused with person agreement).
- The presence of –(s)I in compounds as well as in 3rd person GPs have led researchers to suggest that they are in fact the same marker, namely 3rd person singular possessive (e.g. Lewis 1967, Kornfilt 1984, Tat 2010):

- (16) a. çocuk kitab-ı (compound)
 child book-(s)I
 ‘children’s book’
- b. çocuğ-un kitab-ı(+Ø) (possessive construction)
 child-3SGEN book-(s)I(+3S)
 ‘the book of the child’

- However, Kunduracı (2013) shows that –(s)I behaves differently from other person markers and she argues that it is a ‘possessum’ marker (however, the question arises with respect to compounds, which lack any possession meaning; also see Taylan & Öztürk (2016), who argue that –(s)I is the spell-out of a functional n head rather than a ‘possessum’ marker).
- One case where –(s)I behaves differently from other markers is below:

- (17) a. biz-im peri-m*(-iz)
 we-1PLGEN fairy-1POSS-PL
 ‘our fairy’
- b. siz-in peri-n*(-iz)
 you-2PLGEN fairy-2POSS-PL
 ‘your (pl) fairy’
- c. onlar-in peri-si(*-iz)
 they-3PLGEN fairy-(s)I (*PL)
 ‘their fairy’

- Also why would Turkish mark 3rd person in nominals while it does not mark it overtly otherwise (e.g. in the verbal domain)?
- Another problem for studies arguing that –(s)I is a person marker is the mutual exclusivity problem:

- (18) a. yemek oda-sı
 eating room-EZ
 ‘dining room’
- b. ben-im oda-(ı+)m
 I-1SGEN room-(EZ+)1S
 ‘my room’
- c. *ben-im yemek oda-sı-m
 I-1SGEN eating room-EZ-1S
 ‘Intended: my dining room’
- d. ben-im yemek oda-m
 I-1SGEN eating room-1S
 ‘my dining room’

- Though the marker on the compound is not there, the compound reading is. Note that it is not possible to get a compound without that marker in Turkish.
- Children also make the mistake of overtly saying that compound marker.
- Given these, the marker on the compound is there. Then, why is it not overt?
- One could say it is phonological. But there is no phonological reason for the deletion of the marker on the embedded compound (since it results in valid consonant and vowel sequences).
- We argue that the marker on the compound gets deleted because it ends up adjacent to another marker with the same function.
- This process happens because Turkish has ‘haplology’ or ‘the stuttering prohibition’, as argued by Kornfilt (1986).
- According to the stuttering prohibition, two similar suffixes cannot be pronounced one after the other, where similarity is defined not in phonological terms but the “category and function of morphemes involved (Kornfilt 1986; 72-73)” in Turkish.
- Here is what we end up with when we get everything in place for (18d) (ignoring FP):

(19) [DP [Spec ben-im] [D' [φP [Spec] [φ' [φP [Spec yemek] [φ' [N oda] φ sı]] φ ı+m]] D Ø]

- Two ezafe markers end up adjacent in (19). Due to stuttering prohibition, one has to be deleted. The former gets deleted due to head-finality in Turkish (i.e. the final one is kept).

4. MODIFIERS IN KURMANJI EZAFE CONSTRUCTIONS

- In Kurmanji, ezafe marker also relates the adjectives, PPs and Relative Clauses to the head noun, which we take all as modifiers.
- Considering the behaviors of modifiers in Kurmanji, we hold the view that modifiers are merged late within the derivation (a la Lebeaux, 1988).³
- In single ezafe constructions of Kurmanji, we observe either N-ARG or N-MOD order (20-22). However, ezafe marker is also required when the head noun is modified by more than one successive element (*modifier-chain*, Haig 2014), and in such constructions the argument (e.g. possessor) is always closer to the head while the modifier stands at the rightmost, yielding the order N-ARG-MOD (21-22).

(20) a. keçk-a min
 daughter-EZ.F 1S.OBL
 ‘my daughter.’

b. keçk-a piçûk
 daughter-EZ.F young
 ‘young(er) daughter’

(21) keçk-a min a piçûk
 daughter-EZ.F 1S.OBL EZ.F young(er)
 ‘my young(est) daughter’

(22) a. belav-ê**n** te
 shoe-EZ.PL 2S.OBL
 ‘your shoes’

b. belav-ê**n** li ber derî
 shoe-EZ.PL in front of door.OBL
 ‘The shoes in front of the door.’

³ Lebeaux (1988) argues that the Projection Principle proposed by Chomsky (1986) requires that arguments but not adjuncts be present at merge thus merge applies to arguments, i.e. to theta marked constituents, but adjuncts which are not theta selected enter the derivation just before SPELL Out.

(23) belav-ên te yên li ber derî
 shoe-EZ.PL 2S.OBL EZ.PL in front of door.OBL
 ‘your shoes (which are) in front of the door’

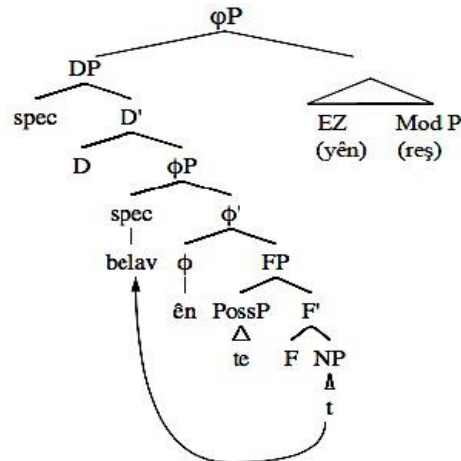
- Assuming that the head is merged in the lowest position and undergoes roll-up movement to yield the surface order, the modifiers are supposed to merge in a lower position than the possessor in the derivation.
- However, wh-questions argue against this view because modifiers seem to be in a higher position: in N-ARG-MOD order only the modifier can be questioned (25).

(24) a. belav-ên kî
 shoe-EZ.PL who
 ‘whose shoes’
 b. belav-ên kîjan?
 shoe-EZ.PL which
 ‘which shoes’

(25) a. * belav-ên kî yên reş
 shoe-EZ.PL who EZ.PL black
 (whose black shoes)

b. belav-ên te yên kîjan
 shoe-EZ.PL 2S.OBL EZ.PL which
 ‘which of your shoes?’

- (25) implies that the modifier-chain constructions display island-like properties as the constituents inside the phrase except for the rightmost element – modifier are not visible for further operations.
- We suggest that modifiers are late-merged in the derivation closing the phrase thus they are visible for operations such as wh-questions:



- Given that modifiers are adjuncts and do not have a theta relation with the head noun, late merging of modifiers is a reasonable assumption (Lebeaux 1988).
- Turkish, on the other hand, does not require *ezafe* in adjectival modification cases. Therefore, it looks like adjectives are merged as phrases in the specifier of NPs rather than being linked by a head with the *ezafe* marker.

5. CONCLUSION

- This talk has looked into different nominals formed by *ezafe* marker in Kurmanji and Turkish: with a focus on compounds and possessive phrases.
- Drawing on the analysis for pronouns by Déchaine & Wiltchko (2010) and based on the existence or lack of variable-like behavior, we proposed that compounds in both languages are φ Ps while possessive phrases are DPs.
- We also showed that Kurmanji *ezafe* utilizes *ezafe* in adjectival modification contexts as well, which Turkish does not.
- The reason for that difference is that Turkish adjectives are introduced in SpecNP positions while Kurmanji adjectives are late-merged, requiring another layer of structure linked to the nominal. Kurmanji marks this linking by *ezafe*.
- These findings are important in at least two respects: (i) *ezafe* is not confined to Iranian languages and (ii) the structures of different nominals and parametric variation can be captured when *ezafe* is analyzed systematically.

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