# Compound Formation in Karachay-Balkar: Implications for the marker -sI\*

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ABSTRACT: This paper discusses semantic and morpho-syntactic properties of compound formation in Karachay-Balkar with a special focus on Noun-Noun compounds which surface with or without the marker -sI. We propose that when the head noun is transitive, the non-head has argumental status and the marker -sI is the head of the projection introducing the argument. This is in line with the proposal of Öztürk and Taylan (2016) for the marker -sI in possessive free genitive constructions in Turkish. Turkish belongs to southwestern Turkic language group and Karachay-Balkar to the northwestern group. The investigation reveals that although the distribution of -sI with compounds is not the same in these two languages, behind its obligatory appearance the same pattern is at work: -sI must surface when the head is transitive. Karachay-Balkar is more restrictive in that -sI surfaces only with nouns that are inherently transitive in the absence of type shifting operators. In this paper we also focus on the function of -sI in genitive-possessive constructions. Drawing on compounds in Karachay-Balkar and Turkish, we conclude that what appears on the head noun in genitive-possessive constructions is possessive agreement marker on a par with first and second person agreement markers.

Keywords: Karachay-Balkar, compounds, lexical relations, genitive-possessive constructions

### Karaçay-Malkar Bileşik Sözcük Oluşumu: -sI belirtici için sonuçlar

Bu makale Karaçay-Malkar dilinde özellikle Ad-Ad bileşik sözcüklerinin, ki bu sözcükler -sI belirticisi ile veya -sI belirticisiz ortaya çıkarlar, biçimbilimsel, sesbilimsel, anlambilimsel ve sözdizimsel özelliklerini inceler. Makale aynı zamanda Türkçe bileşik sözcük oluşumu için de aydınlatıcıdır. Öztürk ve Taylan (2006) ile aynı doğrultuda -sI belirticisinin Karaçay-Malkar

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dilinde nP bağdaştırmasının başı olarak katılan varlığını işaret ettiğini savunuyoruz. Bununla birlikte Karaçay-Malkar Türkçeden daha sınırlayıcıdır çünkü -sI belirtici sadece özü itibariyle geçişli sözcüklere eklenir. Bu makalede aynı zamanda genitif-ilgi yapılarında -sI belirticisinin işlevini de sorguluyoruz. Karaçay-Malkar ve Türkçe bileşik sözcüklere dayanarak -sI belirticisinin hem bileşik sözcüklerde hem de genitif-iyelik yapılarında katılanı getiren yapı olarak görmekle birlikte genitif-iyelik yapılarındaki -sI belirticisinin tıpkı birinci ve ikinci şahıs uyum eklerinde olduğu gibi kişi uyum eki olduğunu savunuyoruz.

Anahtar Sözcükler: Karaçay-Malkar, bileşik sözcükler, sözcüksel ilişkiler

#### 1 Introduction

In this paper we investigate compounds of Karachay-Balkar, an under-studied Turkic language, which exhibits peculiar compounding properties. Karachay-Balkar (KB), Turkic language from the Northwestern Kipchak language group, is spoken mainly in the south parts of Karachay-Cherkessia and Kabard-Balkar Republics of Russia. KB is also spoken in Konya Başhüyük village<sup>1</sup>.

Compounding is a prevalent word formation strategy which is based on combining two lexemes as a result of which a new lexical item is created. Being a widely used word formation strategy, compounding is under investigation with respect to the semantic and syntactic relation between the two constituents.

In the literature it is suggested that similar to the lexical items from the verb category, nouns can be transitive or intransitive (Löbner 1985, 2002, Barker 1995, Vikner and Jensen 2002, Partee and Borschev 2003). One-place, intransitive nouns denote a set of entities, individuals or concepts as indicated with the bold constituents in (1).

- (1) The **dog** opened the **door**.
- (2) My uncle is going to marry Moly's sister. (Löbner 2002: 106-107)

Two-place, transitive nouns denote a relation between two sets of entities, individuals or concepts as in (2). The individuals called 'uncle' or 'sister' can

<sup>&</sup>lt;sup>1</sup> The speakers of KB in Konya are descendances of the immigrants coming from Russia between the years of 1903-1906. Karachay-Balkar dialect spoken in Russia has been cited as a vulnerable language by UNESCO, namely the language is acquired by children but its usage is restricted to certain domains. A recent study on the Karachay-Balkar dialect spoken in Eskişehir (Boz and Günay Aktaş 2016) has revealed that the dialect is hardly ever spoken by 1-20 year-old generation and it is restricted to home with 30 year-old and above generation. Our recording sessions with speakers from Konya have also shown that only the oldest generation is fluent in the language.

have these labels only when they have a relation with another individual. The entities in (1) do not have to relate to another referent to bear these labels.

Taking a step further and based on the assumptions of the qualia structure Vikner and Jensen (2002), Partee and Borschev (2003) propose the following relations between two lexemes.<sup>2</sup>

(3) Inherent: kinship terms, verb related nouns (aim, arrival, death...), relational nouns (content, color, form, title)

Part-whole:

- (a) dependent part-whole: bottom, corner, edge, front...
- (b) autonomous part-whole: nose, trunk, engine, wheel...

Agentive: poem, cake

Control: car, stone, computer

Only 'inherent' and 'dependent part-whole' relations are lexically transitive in the sense that they need to relate to another entity for their denotation.

Now let's focus on compound formation in KB comparing it with standard Turkish. KB is similar to standard Turkish in that Noun-Noun compounding is a prevalent word formation process. In standard Turkish, compound marker -sI obligatorily surfaces on Noun-Noun compounds as in (4).<sup>3</sup>

(4) a. at araba-sı b. diş doktor-u horse car-sI tooth doctor-sI 'carriage' 'dentist'

There is another group which is labeled as 'bare compounds' without the -sI marker. <sup>4</sup> Göksel and Kerslake (2005) suggest that this compound type is used (i)

<sup>&</sup>lt;sup>2</sup> The details of the two studies differ in the sense that in contrast to Partee and Borschev 2003, Vikner and Jensen 2002 suggest that a genitive NP can only hold a relation with a transitive head and hence all genitives are of argumental type. Partee and Borschev 2003 on the other hand suggest that the genitive NP can be of modifier type and hold a transitive relation between the head via type shifting, transitivizing operators.

 $<sup>^{3}</sup>$  -sI has many allomorphic variations. The high vowel of -sI undergoes vowel harmony (1). When attached to a root that ends in a consonant [s] is dropped (2). When followed by inflectional morphology, it surfaces as -(s)In (3). For ease of exposition, we will use -sI in glosses.

<sup>(1)</sup> oyuncak kutu-su toy box-sI toy packet-sI toy box' (2) oyuncak paket-i (3) oyuncak kutu-sun-da toy box-sI-LOC toy box' toy packet' (in/on the toy box'

<sup>&</sup>lt;sup>4</sup> There are questions raised regarding the compound status of these constituents. Kunduracı (2013) suggests that these are not compounds because it is possible to insert

when the non-head constituent, the first noun, denotes the sex or the profession of the person (5a), (ii) when the non-head specifies the nationality of the head noun (5b), (iii) when the non-head specifies the material out of which the head noun is made (5c), (iv) with cooked dishes (5d), (v) with street names (5e).

(5) a. kız arkadaş b. Alman mimar c. çelik kapı 'girlfriend' 'German architect' 'steel door' d. şiş kebap e. Akgül sokak 'Shish kebab' 'Akgül street'

(Göksel and Kerslake 2005: 102, 103)

KB has the counterparts for 'bare compounds' without -sI, in which the non-head specifies the material out of which the head noun is made (6a-c) or the sex of the person (6d).

(6) a. temir eşik b. agaç üy c. dariy kiyim d. tişiruv dohtur 'iron door' 'wooden house' 'silk cloth' 'woman doctor'

Apart from the forms in (6), in KB the marker -sI does not surface on compounds the Turkish counterparts of which obligatorily bear -sI. The KB counterparts of the compounds in (4) are illustrated in (7) below. <sup>5</sup>

(7) a. at arba b. tiş dohtur horse car 'carriage' tooth doctor 'dentist'

another constituent between the head and the non-head while this is not possible with -sI compounds.

(1) a. Alman mühendis b. Alman bir mühendis German a engineer 'A German engineer'

(2) a. inşaat mühendis-i b. \*inşaat bir mühendis-i construction engineer-sI construction a engineer-sI Int. reading: 'a civil engineer'

<sup>5</sup> Compounds without the *-sI* marker is also observed in many other Turkic languages (Tokyürek and Pekacar 2014 and references cited therein).

(1) Chuvash (2) Kumyk (3) Bashkir (4) Nogai Azi tiv Gögürçün Göl baksa Nogay ganat şay wing' 'Asia continent' 'dove 'rose garden 'Noghai tea' (5) Altaic (6) Tuva (7) Khakas (8) Uyghur Tuva hep bigiz kol Takaa Tabat aal cıl 'chicken year' 'Tuva cloth' 'Tabat village' index finger'

Note that in (6-7), the relation between the head and the non-head is not the same. Only in (6), the non-head modifies the head-noun. What is more interesting is that the marker -sI is obligatory with some other forms as in (8).

(8) a. cer baş-ı b. tüş ana-sı dream mother-sI 'world' 'goddess of dreams'

We will argue that the semantic relation between the head and the non-head is not the same in (7) and (8). The compounds in (7) include an intransitive head-noun, while the head-noun is transitive in (8). The marker -sI does not indicate that the compound is a subordinate compound but it indicates the presence of an argument.

The next section illustrates the morphological properties of KB compounds. In section 3, we will propose a syntactic analysis for KB compounds which reflects the relation between the head and the non-head. In Section 4, we will discuss genitive-possessive constructions and extend the syntactic analysis to capture the derivation of genitive-possessive constructions. Section 5 concludes the paper.

# 2 Karachay-Balkar Compounds

With the aim of revealing the triggering factor for the distribution of the marker -sI, we went over the dictionary of Karachay-Balkar (Tavkul 2000) and recorded data from native speakers of KB living in Konya. The recorded data was not specifically designed to elicit compounds in KB but they were composed of free conversations about daily life activities, KB customs and traditions and stories in the target language. Five speakers of KB living in Konya, with the age range of 45-72, were also consulted for grammaticality judgments. Based on these main sources we came up with a list of 383 compounds. The following table illustrates the classification of these compounds under the categories of subordinate, attributive and coordinative compounds (Bisetto and Scalize 2005).

Table 1. Compounds in KB

	Subordinate	Attributive	Coordinative
1	çibin av spider web	kerti gün real day 'day of judgment'	arı beri there here 'here and there'
2	avuz suv	tış kıral	kısha-kısha
	mouth water	outside country	near-near
	'saliva'	'foreign country'	ʻoften
3	töben can-ı	kurç at	agurça-magurça
	bottom side-sI	steel horse	cucumber
	'north'	'tractor'	'vegetables'
4	üy tüb-ü	ak topurak	dıkkı-mıggı
	house bottom-sI	white soil	little
	'flooring'	'lime'	'a little'

Subordinate compounds have a head-complement relation, and the non-head encodes a property of the head noun in attributive compounds. Coordinative compounds are formed via coordinated lexemes. The scope of the paper is restricted with subordinate compounds.

In KB, left and right branching recursion is possible with compounds. Note that even in these forms -sI does not surface.

(9) a. [[[kitab bet] zakaz] cazuv]
book page order writing
'the note for book page order'
b. [sohta [kültür sentir]]
student culture center
'a culture center for students'

When the head noun does not bear -sI, inflectional markers and derivational markers surface on the head noun as illustrated in (10) and (11) respectively.

- (10) a. tepsi cabuv-nu kör-dü-m table cloth-ACC see-PAST-1SG 'I saw the table cloth.'
  b. kampyuter sumka-la uçuz-dula. computer bag-PL cheap-3PL 'The computer bags are cheap.'
- (11) a. tiş dohtur-luk kıyın-dı. tooth doctor-lIK difficult-3SG 'Being a dentist is difficult job.'

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b. tepsi cabuv-suz üy
table cloth-sIz house
'a house without a table cloth'
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With the forms that bear the marker -sI, -sI follows plural marker and precedes case markers.

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(12) a. tepsi üs-ler-in-de surat bar-dı.
table top-PL-sI-LOC picture exist-3SG
'There is a picture on top of the tables'
b. caş can-ı-nı süy-dü-m.
boy side-sI-ACC like-PAST-1SG
'I liked the bridegroom's side.'
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It is not possible to add plural marker to the non-head constituent (13a).

However in some lexicalized compounds it is possible to find plural marker on the non-head noun (13b).

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(13) a. *oram-la kiştik b. kıral-la ara-sı country between-sI 'interstate'
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With this background in mind, in the next section we will focus on the distinction between the compounds that obligatorily bear -sI, and those that do not bear this marker.

# 3 The Semantic Relation in Compounds

Before we move onto the current analysis, we will go over the suggestions for the distribution of -sI in KB compounds.

Seegmiller (1996: 15) notes that "the 'izafet' type of compound that is so common in Turkish, in which the second member of a noun is marked with the suffix **I**, is rare in Karachay. A few compounds may occur either with or without the suffix I – both *ana tili* and *ana til* 'mother tongue' are found...but in general the izafet type is quite rare."

Based on this observation, one can suggest that -sI is optional and its distribution is not predictable. There are some problems with this line of a proposal. First of all, when we asked the native speakers whether 'ana til' and 'ana tili' are both fine, only the first option was found to be acceptable.<sup>6</sup> The

<sup>&</sup>lt;sup>6</sup> In both Nevruz (1991: 39) and Tavkul (2000: 84), 'ana til' is given for the word 'mother tongue'.

other problem is that -sI is obligatory in some Noun-Noun compounds as the following examples indicate.

(14) a. tengiz kıyır-\*(1) b. tav baş-\*(1) sea side-sI mountain top-sI 'seaside' 'mountain top'

Tavkul (2007: 924) suggests that in contrast to Turkish, in KB, compounds do not bear -sI and he labels these forms as indefinite noun phrases.

(15) a. terek salqın tree shade fruit tree 'tree shade' 'fruit tree'

This line of an analysis runs into problems with the compounds that obligatorily bear -sI as in (14). We further argue that we cannot analyze the forms in (15) as 'noun phrases' because they have different formation restrictions. In a typical noun phrase we can rephrase and put the adjective in predicative position as in (16). The non-head constituent has modifying function in noun phrases and hence predication is possible for the modifier. Additionally, it is possible to insert an expression between the head and the non-head constituent as in (17).

b. kiyim dariy-di. (16) a. dariy kiyim cloth silk-3SG ʻsilk cloth' 'The cloth is silk' b. arba cangı-dı. (17) a. cangı bir arba new-3SG new a car car 'a new car' 'the car is new'

However these are not possible in compounds as illustrated in (18-19). These contrasts indicate that the non-head does not have a modifying function in compounds and the head and the non-head form a word like opaque unit.<sup>7</sup>

(1) a. mavi etek b. etek mavi skirt blue skirt skirt blue 'blue skirt' 'the skirt is blue'

<sup>&</sup>lt;sup>7</sup> For Turkish, Göksel and Haznedar (2008) take the presence or absence of –sI, which they label as the linking element, as a criterion for differentiating attributive and subordinating compounds.

(18) a. at arba b. \*arba at-dı. horse car 'carriage'
(19) tiş (\*bir) cıcım tooth a rope 'tooth floss'

Hence we cannot suggest that these forms are noun phrases. If we turn to Table 1, it is clear that -sI surfaces only with subordinate compounds. However, it is not possible to suggest that -sI obligatorily surfaces with subordinate compounds as the examples in (1-2) in the table indicate.

So far we have found out that the function of the of marker -sI is not to specify that (i) the compound is a subordinating type of compound or (ii) the non-head is of the noun category. However we still cannot explain the distribution of -sI. The following examples illustrate forms without -sI.

(20) a. alma terek	b. çibin av	c. ayak kiyim
apple tree	spider web	foot garment
	'spider's web'	'shoe'
d. kurman bayram	e. caz kiştik	f. çabak kanat
sacrifice feast	hunting cat	fish wing
	'wildcat'	'fin'
g. darman kagıt	h. el tore	i. üy hapçük
cure paper	people court	house good
'prescription'	'people's court'	'household goods'

In all forms given in (20a-i), there is not an inherent relation or dependent partwhole relation between the head and the non-head constituent. The head is a one-place noun denoting a certain entity.

Now we will focus on the forms with obligatory -sI on the head noun.

b. cer

(21) a. suv

water trace-sI 'riverside'	earth owner-sI sea side-sI 'earth nymph' 'seaside'
(2) a. mavi reng-i blue color-sI	b. *renk mavi color blue
'the color blue	Int. reading: 'the color is blue'

iye-si

c. tengiz kıyır-ı

The noun phrase can be paraphrased with the non-head as the predicate (1) while this is not possible in (2).

d. üy tüb-ü e. cürek baş-ı f. cer tüb-ü house bottom-sI heart head-sI earth bottom-sI 'flooring' 'heart valve' 'underground' g. savut i. çaç eş-me-si baş-ı h. tüş ana-sı hair plait-NOML-sI pots and pans head-sI dream mother-sI 'saucepan lid' 'goddess of dreams' 'braid'

Note that the head nouns that obligatorily bear -sI are inherently transitive in that the head noun encodes an inherent relation (a-b), dependent part-whole relation (c-g), or it is a kinship term (h) or a verb related nominal (i). In other words the head noun is a two-place noun denoting a relation between two sets of entities or individuals. The following examples further support this observation. The head nouns bearing the marker -sI are inherently relational.

(22) a. [tav baş-ın-da] tartış kuru köp e-di mountain top-sI-LOC mountain plant much COP-PAST 'There were many mountain plants on the mountain top.'

b. tan at-mayın [ tav baş-ın-a ] örle-lle<sup>8</sup> dawn throw-without mountain top-sI-DAT climb-AOR 'They climb the mountain top before dawn break.'

(Çağatay 2012: 283 with our modifications)

- c. tirmen kakgıç es-em da [cer üs-ün-de] mill stone if-1PS and ground surface-sI-LOC 'Even if I am a millstone on the earth.'
- d. [Beştav can-1] Arhız Mahar Teberdi Beştav side-sI Arhız Mahar Teberdi 'Beştav side was Arhız Mahar Teberdi'
- e. [taş baş-ın-da] caşav et-e kel-gen-se stone head-sI-LOC life make-ADVB come-PERF-2SG 'You came here having lived on tops of stones.'

(Tavkul 2004: 20, 23 with our modifications)

f. [caş can-1] kel-ir bir kece boy side-sI come-AOR a night 'Boy's relatives come one night' (recording session, speaker MT)

The inflected verbs in agrist undergo changes in spoken form in the following way:

(1) örle-(e)-dile örle-lle (2) cıyıl-a-dıla cıyıl-alla cıyıl-alla gather-AOR-3PL 'They are climbing.' 'They are gathering.'

For Turkish, Öztürk and Taylan (2016) argue that -sI is the spell out of the functional head n that introduces the argument to the structure. They base their arguments on a comparison of possessive free genitives with possessive compounds and genitive-possessive constructions.

In genitive-possessive constructions, the head bears -sI and the non-head bears genitive case. Note that the head noun is a kinship term (23a), verb related noun (23b), relational noun (23c), dependent part-whole (23d), which are all inherently transitive. However the head noun can be a one place noun denoting autonomous part-whole relation (23e), agentive relation (23f) or control relation (23g).

- (23) a. öğretmen-in hala-sı teacher-GEN aunt- sI 'The teacher's paternal aunt' c. makale-nin başlığ-ı
  - c. makale-nin başlığ-ı article-GEN title- sI 'The title of the article'
  - e. araba-nın lastiğ-i car-GEN tire- sI 'The car's tire'
  - g. kadın-ın araba-sı woman-GEN car- sI 'The woman's car'
- b. bina-nın yık-ım-ı building-GEN demolish-NOML- sI 'The demolition of the building'
- d. masa-nın kenar-ı table-GEN edge- sI 'The edge of the table' f. çocuğ-un şiir-i child-GEN poem- sI

'The child's poem'

(Öztürk and Taylan 2016, 7-10 with our modifications)

In possessive compounds the head bears -sI and the non-head surfaces without a marker. <sup>9</sup> Possessive compounds with -sI are compatible with all the relations mentioned in (23) as illustrated in (24) below.

(24) a. öğretmen hala-sı teacher aunt-sI 'aunt of a teacher' c. makale başlığ-ı article title- sI 'article title' e. araba lastiğ-i car tire- sI 'car tire'

b. bina yık-ım-ı
building demolish-NOML- sI
'building demolition'
d. masa kenar-ı
table edge- sI
'table edge'
f. çocuk şiir-i
child poem- sI
'child poem'

Öztürk and Taylan (2016) take genitive marking on the head noun as a marker of specificity. In constructions with -sI without genitive as in (22) the lexical item is non-referential.

g. kadın araba-sı woman car- sI 'women's car'

(Öztürk and Taylan 2016, 26-29 with our modifications)

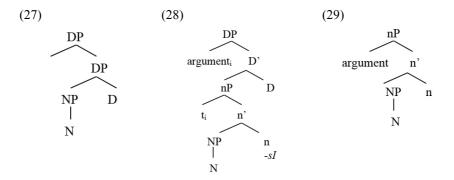
Possessive free genitive forms surface with a head which does not bear -sI and a non-head with genitive case. Öztürk and Taylan (2016) note that in the absence of -sI not all lexical relations can be encoded with these forms. Possessive free genitives are incompatible with lexical items encoding inherent relations (25a-b) or dependent part-whole relations (25c-d). However they are compatible with lexical items denoting autonomous part-whole relations (26a), agentive relations (26b) or control relations (26c), namely with one-place nouns.

- (25) a. \*öğretmen-in hala teacher-GEN aunt 'the teacher's paternal aunt'
  - c. \*makale-nin başlık article-GEN title 'the title of the article'
- (26) a. araba-nın lastik car-GEN tire 'the car's tire'
  - c. kadın-ın araba woman-GEN car 'the woman's car'

- b. \*bina-nın yık-ım building-GEN demolish-NOML 'the demolition of the building'
- d. \*masa-nın kenar table-GEN edge 'the edge of the table'
- b. çocuğ-un şiir child-GEN poem 'the child's poem'

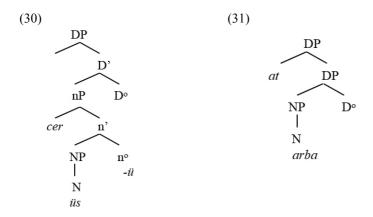
(Öztürk and Taylan 2016, 11-14)

Based on this distributional contrast, Öztürk and Taylan (2016) suggest that lexical items bearing -sI are either inherently transitive, or transitivized via operators. In all these structures there is an nP that hosts the argument. The absence of -sI in (25-26) signals the absence of nP projection and hence there is no room for the argument. When there is -sI on the head noun, the non-head is an argument. The following projections are proposed for these constructions.



The tree structure in (27) represents possessive free genitives without an nP projection to host the argument. Genitive-possessive constructions as in (28) surface with nP projection and an additional DP projection. The movement of the argument to the specifier position of DP makes the noun referential. Finally possessive compounds in (29) include nP projection in the absence of a DP projection and hence the argument is not interpreted as referential.

Based on the differences between KB compounds with and without the marker -sI, in line with Öztürk and Taylan (2016), we suggest that when the head noun is transitive it is nP that hosts the argument as in (30). If the head noun is intransitive, there is only DP in the absence of nP as in (31).



The data further shows that, unlike Turkish, KB reflects the transitivity of the lexical items transparently. In Turkish, as illustrated in (24e-f), -sI surfaces even when the head noun is intransitive. Öztürk and Taylan (2006) suggest that the head is transitivized via type shifting operators.

In KB, with compounds in which the head noun is transitive -sI surfaces obligatorily, and it is absent in forms with intransitive head nouns. Hence we conclude that -sI signals nP projection within the structure which introduces the argument. However the projection of nP is restricted to forms which are inherently transitive such as kinship terms, dependent part whole relations and verb related nouns. The next section focuses on genitive-possessive constructions.

# 4 -sI in Genitive-Possessive Constructions in Karachay-Balkar

The marker -sI is not restricted to compounds in KB and it surfaces in all genitive-possessive constructions. <sup>10</sup>

(32) a. kız-nı ata-sı b. oram-nı kiştig-i girl-GEN father-sI street-GEN cat-sI 'The father of the girl' 'The cat of the street' c. kamyon-nu şaför-ü d. it-ni tavuş-u truck-GEN driver-sI dog-GEN sound-sI 'The driver of the truck.'

In this section we will focus on the nature of -sI in compounds and genitive possessive constructions which will lead us to internal structure of each construction.

In the Turkish linguistics literature, although the details of the analyses differ, there are two main approaches in the analysis of -sI:

- the same -sI marker surfaces in compounds and genitive possessive constructions
   (Lewis 1967, Underhill 1976, Dede 1978, Yükseker 1987, 1994, 1998, Spencer 1991, Uygun 2009, Öztürk and Taylan 2016),
- (ii) different –sI markers surface in compounds and genitive possessive constructions (Swift 1963, Hayasi 1996, van Schaaik 1996, 2002, Kornfilt 1997, Schroeder 1999, Bozşahin 2002, Aslan & Altan 2006, Göksel & Kerslake 2005, Göksel & Haznedar 2008, Göksel 2009, Kharytonava 2010, 2011, Kunduracı, 2013).

For those who suggest that -sI is the same in compounds and genitive possessive constructions:

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<sup>&</sup>lt;sup>10</sup> The native speakers we consulted reported that the following forms are not possible in KB and hence at this stage we can suggest that in KB there are no are possessive free genitive constructions.

<sup>(1) \*</sup>men-i üy I-GEN house Intended reading: 'my house'

- (i) sI marks valency (Öztürk and Taylan 2016) or
- (ii) sI marks possessive agreement marker (Lewis 1967, Underhill 1976, Dede 1978, Yükseker 1987, 1994, 1998, Spencer 1991, Uygun 2009).

For the analyses suggesting different functions for -sI in compounds and genitive possessive constructions, -sI marks possessive agreement only in genitive possessive constructions (Swift 1963, Hayasi 1996, van Schaaik 1996, 2002, Kornfilt 1997, Schroeder 1999, Bozşahin 2002, Aslan & Altan 2006, Göksel & Kerslake 2005, Göksel & Haznedar 2007, Göksel 2009, Kharytonava 2010, 2011).

Kunduracı (2013) suggests that –sI marks possession in genitive possessive forms without specifying third person as the possessor based on the following contrasts.

(33) a. anne-m-siz b. anne-n-siz mother-1SG.POSS-without 'without my mother' c. anne(\*-si)-siz mother(\*-sI)- without 'without his mother'

(Kunduracı 2013:157, 89 with our modifications)

First and second person possessive agreement marker is licit with the derivational morpheme -sIz while this is not possible with -sI.

Although we agree with the judgments in (33), we suggest that the unacceptability can be due to the morphological similarity between the possessive agreement marker and the marker -sI. Additionally, when we have overt genitive all the structures become unacceptable as illustrated in the following example.

(34) a.\*ben-im anne-m-siz bir gün iste-mi-yor-um
I-GEN mother-1SG.POSS-without a day want-NEG-PROG-1SG
'I don't want a day without my mother'
b.\*sen-in anne-n-siz bir gün iste-mi-yor-um
you-GEN mother-2SG.POSS- without a day want-NEG-PROG-1SG
'I don't want a day without your mother'

The unacceptability can be due to modifier function of the constituents with possessive agreement markers. One of the reviewers gives an example similar to the following one which supports our suggestion. In the following context,

the constituent bearing the possessive agreement marker does not have a modifier function.

(35) Bu toplantı belki sen-in anne-n-siz ol-ur ama this meeting maybe you-GEN mother-2SG-sIz become-AOR but ben-im anne-m-siz asla.

I-GEN mother-1SG-sIz never 'This meeting can take place without your mother but it can never take place without my mother.'

To recap, although there seems to be a difference between the marker -sI and first and second person possessive agreement markers, we suggest that the unacceptability can be due to a morphological restriction.

Öztürk and Taylan (2016) suggest that -sI is a valency marker even in genitive-possessive constructions. As an evidence for this argument, they note that when the non-head is second person pronoun the marker -sI appears on the head noun not second person agreement marker as illustrated in the following example.

(36) a. Bu tipik bir sen şikayet-i.
this typical a you complaint-sI
'This is a typical complaint of yours.'
b. \*Bu tipik bir sen şikayet-in.
this typical a you complaint-2SG.POSS
'This is a typical complaint of yours.'
(Öztürk and Taylan 2016:100, 38 with our modifications)

As for the example given in (36), being a compound without genitive case we do not expect possessive agreement on the head noun. Note that we can even have a higher order constituent in this position, in the sense that the pronoun status of the non-head is immaterial for agreement in this construction.

(37) ben bu-(n)u hak et-mi-yor-um şikayet-i I this-ACC deserve-NEG-PROG-1SG complaint-sI 'The complaint of I do not deserve this'

Hence these examples do not stand as strong evidence against the agreement marker status of -sI in genitive-possessive constructions. If -sI is not an agreement marker, but only a valency marker even in genitive-possessive constructions, the marker -sI can surface in constructions with first and second person pronouns as the non-head constituent but this is not possible.

(38) a. ben-im hala-\*(s1)-m
I-GEN aunt-1SG.POSS
'my aunt'

b. sen-in bak-ım-\*(sı)-ın you-GEN look-NOML-2SG.POSS 'your (personal) care'

Kunduracı (2013) suggests that the forms in (38) never surface because all possessive markers compete for the same slot and hence more than one possessive marker cannot appear, although -sI marks only possession not agreement. This is an arbitrary suggestion because possession and agreement split-up is observed only with third person possession.

We take another line of an analysis and suggest that -sI in genitive possessive constructions is third person possessive agreement marker on a par with first and second person possessive agreement markers. The valency marker -sI does not surface as it is mutually exclusive with possessive agreement markers. Remember that KB is more transparent with respect to exhibiting transitivity on the head noun via the marker -sI. Hence for the following examples, one cannot suggest that -sI marks valency but not agreement.

(39) a. Ayşa-nı sağat-ı Ayşa-GEN watch-sI 'Ayşe's watch.' b. Ahmat-nı üy-ü Ahmat-GEN house-sI 'Ahmet's house'

Both Kunduracı (2013) and Öztürk and Taylan (2016) argue that possessive agreement for third person is not expected in the absence of agreement for third person in finite clauses. Siewierska (2008) suggests that from a cross-linguistic perspective it is highly unlikely to mark possessive agreement in the absence of overt person agreement on the predicate. Turkish does not mark third person agreement on the predicate and hence we do not expect -sI to mark person agreement in genitive possessive constructions.

(40) a. Ben resim çiz-iyor-um.

I picture draw-PROG-1SG
'I am drawing a picture.'

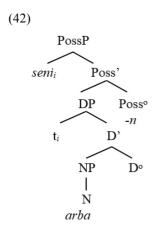
b. O resim çiz-iyor. S/he picture draw-PROG 'She is drawing a picture.'

In contrast to Turkish, KB marks third person overtly on predicates as -dI (41a-b). Only in the presence of past tense marker -dI, with which agreement marker shares the same morphological form, third person agreement marker does not surface overtly (41c). We suggest that as they have the same morphological form, this restriction is a morphological one.

- (41) a. Kız ata-sın-a savga al-lık tül-dü. girl father-POSS-DAT present buy-FUT not-3SG 'The girl is not going to buy a present for her father.'
  - b. Katın üy-nü sibir-gen-di. woman house-ACC vacuum-EVID-3SG 'The woman vacuumed the house.'
  - c. Kız kiştik-ni süy-dü. girl cat-ACC like-PAST 'The girl liked the cat.'

Drawing on this discussion we suggest that the marker -sI which signals nP projection introducing the argument does not surface in the presence of possessive agreement markers due to morphological restrictions. Given that in KB, (i) -sI is restricted to transitive heads and (ii) third person agreement marker is marked even on the predicate we conclude that -sI is a different marker in genitive possessive constructions encoding possessive agreement. One can suggest that in genitive-possessive constructions transitivizing operators are at work and hence -sI as a valency marker surfaces on the head noun in (39). A natural question is raised against this proposal as to why such a type shifting operator is not at work with compounds similar to Turkish. Hence we suggest that although the same marker -sI surfaces in both compounds with transitive heads and genitive possessive constructions they have different functions.

We conclude the discussion with the structure of genitive-possessive constructions in KB.



In (42), the non-head constituent is base generated in Spec DP and moves to Spec PossP and gets genitive case. When we look at the structures proposed by Öztürk and Taylan (2016) given in (27-29), the referentiality of the non-head is due to the presence of DP in genitive-possessive constructions and possessive free genitives. DP is not projected in compounds and hence the non-head cannot be interpreted as referential. Similar to Turkish, in KB only the non-head in genitive-possessive constructions can be interpreted to be referential. We suggest that in KB it is the genitive case marking on the non-head that makes referentiality possible in the presence of PossP but this issue needs further research which we leave for future studies.

#### 5 Conclusion

The semantic relation between the two lexemes in compounds and its morphosyntactic reflection is captured via the transitivity parameter in two Turkic languages belonging to different language groups, namely standard Turkish and KB. The classification of KB compounds as subordinate, attributive and coordinate reveals that similar to Turkish the marker -sI does not signal subordinate relation between the two lexemes. If the head noun a two-place noun encoding kinship terms, dependent part wholes or if it is derived from a verb, the argument status of the non-head is signaled via -sI which is the head of the nP projection. KB differs from Turkish in that type shifting operators are not used to make one-place head nouns transitive. Hence the marker -sI surfaces only on transitive heads in KB.

Drawing on the parallelism between finite clauses, in which third person is marked on the finite predicate with an overt marker, and noun phrases we suggest that the marker -sI in genitive-possessive constructions is possessive agreement marker in KB.

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