

Nominal linkers in Central Kurdish (Silemānī variety)

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Focusing on the Silemānī variety of Central Kurdish, this paper explores the distribution of modifiers, possessors, and arguments within the noun phrase as well as the linking vowels that precede these elements. The position of modifiers and the form of the linker both differ in indefinite and definite noun phrases. In indefinite phrases, modifiers follow the plural and indefinite suffixes and appear with a linker of the form *-ī*. In definite phrases, however, modifiers precede the plural and definite suffixes and appear with a linker of the form *-a*. Since an *-a* linker is found in many compounds, we consider general issues of modification versus compounding in Central Kurdish as well. Finally, possessors and arguments do not show sensitivity to definiteness. In all noun phrases, possessors and arguments occur after number and definiteness morphology with a linker of the form *-ī*.

1 Introduction

Central Kurdish, also known as Sorānī (Kurdish), is spoken by approximately 4,750,000 people in the Kurdistan Region of Iraq, 3,000,000 people in the provinces of Kermanshah, Kurdistan, and West Azerbaijan in Iran, and 250,000 people in diasporic populations around the world (Sheyholislami 2021). In Figure 1, the Central Kurdish speech area in Iraq and Iran is indicated in yellow (Ahmadi 2021: 3). Along with Arabic, Central Kurdish is an official language of Iraq.

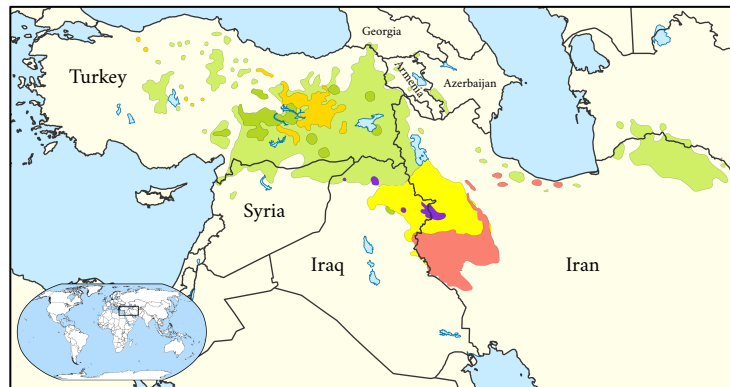


Figure 1. Geographical distribution of languages spoken by Kurdish populations: Northern Kurdish (light green), Central Kurdish (yellow), Southern Kurdish (red), Zazakī (gold), Gorānī (purple), and overlapping areas (dark green)

Central Kurdish is classified into two principal subgroups, Mukrī and Silemānī, whose respective linguistic centers are Mahābād, Iran and Silemānī (Sulaymaniyah), Iraq (MacKenzie 1961, McCarus 2009, Öpengin 2016, Sheyholislami 2021).¹ In recent work, Matras (2019) classifies Central Kurdish into northern and southern innovation zones, with Mahābād in the northern zone and Silemānī in the southern zone.

¹ See chapter 3 of this volume for a description of nominal linkers in the Ardalānī variety of Central Kurdish, which is spoken in Sina (Sanandaj), Iran and neighbouring regions.

Central Kurdish uses a modified Arabic alphabet, and the written standard is based on the Silemānī variety (McCarus 1997; Blau 2000; Thackston 2006; McCarus 2007, 2009; Haig 2019b). We adopt Thackston's (2006) system for the purposes of transliteration, with one amendment: the use of the macron (\bar{a}) rather than the circumflex (\hat{a}) to distinguish the vowels \bar{a} , \bar{i} , and \bar{u} from a , i , and u . Although we focus on Silemānī Kurdish, the native language of the second author, we strive to illustrate the phenomena under discussion using vocabulary that is broadly understood, noting regional differences when relevant.

Our objective is to present the distribution of modifiers, possessors, and arguments in Central Kurdish and the form of the linking vowels that are used with these elements. To this end, we first establish the basic morpheme order of the noun phrase, which differs in indefinite, definite, and demonstrative constructions. The remainder of this paper is organized as follows. Section 2 considers the expression of number and definiteness in Central Kurdish. Section 3 describes the position of modifiers, their ordering with respect to definiteness morphology and to other modifiers, and the form of the linker ($-\bar{i}$ versus $-a$). Section 4 explores compounds, especially those containing linkers of the form $-a$, and identifies several diagnostics that differentiate compounding from modification. Section 5 examines the ordering of possessors in relation to definiteness and modifiers, and section 6 does the same with arguments. Section 7 summarizes the observed patterns and discusses possible avenues for future research.

2 Number and definiteness

This section introduces the plural, indefinite, and definite suffixes in Central Kurdish and the relative ordering of these morphemes.

2.1 Indefinite noun phrases

Singular nouns can appear as bare arguments in Central Kurdish and may be interpreted generically or existentially depending on the predicate or the context (MacKenzie 1961; Abdulla and McCarus 1967; Blau 2000; Thackston 2006; McCarus 2007, 2009; Öpengin 2016; Tahir 2018; Haig 2019b).²

- | | |
|--|--|
| (1) a. sag bawafā=ya.
dog loyal=COP.3SG ³
'Dogs are loyal.' | b. pishīla=m háya.
cat=1SG have
'I have a cat/cats.' |
|--|--|

As indicated by the translation of (1b), existential readings of uninflected, or nonpluralized, nouns are number neutral in the absence of a determiner.

In indefinite noun phrases, the use of the plural suffix $-\bar{a}n$ is typically limited to nouns that either denote human beings or intervals of time (McCarus 2007: 1021).^{4,5}

- | | |
|---------------------------------------|---|
| (2) a. zhin-ān
woman-PL
'women' | b. birā-yān
brother-PL
'brothers' |
|---------------------------------------|---|

² Stress is generally word final in Central Kurdish (McCarus 1997; Blau 2000; Thackston 2006; McCarus 2007, 2009; Öpengin 2016). Exceptional stress placement is marked with an acute accent, as in *háya* 'have' in (1b).

³ The following abbreviations are used in this paper: 1 = first person, 3 = third person, CMPR = comparative, COMP = complementizer, COP = copula, DEF = definite, DIST = distal, INDF = indefinite, IZ = *izāfa*, LK = linker, PL = plural, PROG = progressive, PST = past, SG = singular, SUP = superlative.

⁴ To maintain a uniform orthography, we have adapted cited examples to reflect Thackston's (2006) transliteration of Central Kurdish, and we have added glosses in cases where they were not included in the original source.

⁵ In (2b), a glide is inserted between *birā* 'brother' and the plural suffix $-\bar{a}n$. This process occurs consistently when stems ending in $-\bar{a}$, $-e$, and $-o$ are pluralized and variably when stems ending in $-\bar{i}$ and $-\bar{u}$ are pluralized (MacKenzie 1961, Abdulla and McCarus 1967, McCarus 1997, Blau 2000, Thackston 2006, Öpengin 2016). The plural suffix triggers deletion of stem-final $-a$, as shown in (18b).

- (3) a. shaw-ān
night-PL
'nights, at night'
- b. hāwīn-ān
summer-PL
'summers, in the summertime'

The minimal pair in (4) shows that the plural suffix is felicitous with *pyāw* 'man' but not with *sag* 'dog'.⁶

- (4) a. pyāw-(ān) á-bīn-im.
man-PL PROG-see-1SG
'I see (some) men.' (McCarus 2007: 1022)
- b. sag-(#ān) á-bīn-im.
dog-PL PROG-see-1SG
'I see a dog/dogs.'

Since Central Kurdish permits bare uninflected nouns, the plural suffix is optional in (4a). As indicated by the translation, this suffix introduces a degree of specificity that the bare argument lacks.

Unlike the plural suffix, the unstressed indefinite suffix *-èk* can be used with virtually any noun that allows for a count interpretation (MacKenzie 1961; Abdulla and McCarus 1967; Blau 2000; Thackston 2006; McCarus 2007, 2009; Öpengin 2016; Tahir 2018; Haig 2019b; Karim 2023).⁷

- (5) a. sag-èk á-bīn-im.
dog-INDF PROG-see-1SG
'I see a dog.'
- b. khānū-yèk á-bīn-im.
house-INDF PROG-see-1SG
'I see a house.'

As opposed to *sag* 'dog' in (4b), which has a number-neutral reading, *sagèk* 'a dog' in (5a) can only be interpreted as singular. While it is possible for a noun to appear with both the plural and the indefinite suffixes, as in (6), this construction is generally limited to nouns that are compatible with the plural suffix.

- (6) a. kas-ān-èk
person-PL-INDF
'certain people' (Tahir 2018: 127)
- b. sāl-ān-èk
year-PL-INDF
'certain years'

In such cases, the plural suffix is rigidly ordered in relation to the indefinite suffix.

- (7) a. *kas-ek-ān
person-INDF-PL
- b. *sāl-ek-ān
year-INDF-PL

To summarize, the plural suffix has a more restricted distribution than the indefinite suffix, and these suffixes rarely occur together.

2.2 Definite noun phrases

There is substantial debate concerning the form and interpretation of definiteness in Central Kurdish (MacKenzie 1961; Blau 2000; Thackston 2006; Karimi 2007; McCarus 2007, 2009; Öpengin 2016; Tahir 2018; Haig 2019a,b; Karim 2023). The data in (8) illustrate the three types of definite expressions.

- (8) a. zhin-á
woman-DEF
'the woman'
- b. zhin-ak-á
woman-ak-DEF
'the woman'
- c. aw zhin-á
DIST woman-DEF
'that woman'

⁶ The stressed progressive marker is realized as *dā-* in all varieties of Central Kurdish other than Silemanī, where it has been reduced to *á-* (MacKenzie 1961, Thackston 2006, Öpengin 2016, Matras 2019).

⁷ The indefinite suffix and the numeral *yek* 'one' have the same diachronic source (Tahir 2018, Haig 2019a, Karim 2023). In (5b), a glide is inserted between *khānū* 'house' and *-èk*, as is the case with all vowel-final stems (MacKenzie 1961, Abdulla and McCarus 1967, McCarus 1997, Blau 2000, Thackston 2006, McCarus 2009, Öpengin 2016).

As Tahir (2018) observes, all definite noun phrases have one element in common, the stressed suffix *-á*. Nevertheless, the construction in (8a), where *-á* is suffixed to the noun to the exclusion of *-ak*, requires a discourse referent and is typically limited to narrative contexts (MacKenzie 1961, Öpengin 2016, Tahir 2018).⁸ For instance, *zhinèk* ‘a woman’ in (9a) introduces the referent of *zhiná* ‘the woman’ in (9b).

- (9) a. *zhin-èk re=y dá-kird baraw ema lagał dū mindāl-aká=y.*
 woman-INDF way=3SG PROG-make.PST towards us with two child-DEF=3SG
 ‘A woman was running towards us with her two children.’
 b. *zhin-á hāwār=ī dá-kird bo yārmātī.*
 woman-DEF shout=3SG PROG-make.PST for help
 ‘The woman was calling for help.’ (Tahir 2018: 100)

As for *-ak*, we follow Öpengin (2016) and Tahir (2018) in glossing the combination of this morpheme and *-á* as a definite suffix in this paper. In demonstrative phrases like (8c), however, *-á* is used to the exclusion of *-ak* (MacKenzie 1961, Öpengin 2016, Tahir 2018). Different possibilities have been raised regarding the diachronic source of *-ak*: Tahir (2018: 180) suggests that *-ak* may be related to the numeral *yek* ‘one’, Haig (2019a: 136) proposes that *-ak* evolved from the diminutive morpheme *-ag*, which was highly productive in Middle Iranian, and Karim (2023: 139) identifies the relativizer *ka* as a third potential candidate.

The position of the plural suffix varies in definite and demonstrative noun phrases. In definite phrases, the plural suffix follows *-ak*.^{9,10}

- (10) a. *zhin-ak-ān* b. *birā-k-ān*
 woman-DEF-PL brother-DEF-PL
 ‘the women’ ‘the brothers’

In demonstrative phrases, the plural suffix can appear together with the definite suffix *-á*, in which case the plural suffix is ordered first.¹¹

⁸ Öpengin (2016: 60) provides a similar example from an oral corpus of Mukrī. These contexts are reminiscent of those in German where nouns appear with the weak form of the definite article once the referent has been established as the central figure in a narrative (Ebert 1971; Schwarz 2009, 2019).

⁹ Whether the stressed element *-á* is present in the noun phrases in (10) is open to debate. If so, the underlying form of *zhinakān* ‘the women’ in (10a) is *zhin-ak-á-ān*, and that of *birākān* ‘the brothers’ in (10b) is *birā-ak-á-ān*, where the stressed plural suffix *-ān* triggers elision of *-á*. Alternatively, *-á* and *-ān* may be mutually exclusive when *-ak* is present, reflecting the situation in Persian where the colloquial definite suffix *-e* and the plural suffix *-hā* are mutually exclusive (Ghomeshi 2003, Kahnemuyipour 2014).

¹⁰ In (10b), *-ak* reduces to *-k* after *birā* ‘brother’, which happens consistently after stems ending in *-a*, *-ā*, and *-o* and variably after stems ending in *-e* (MacKenzie 1961, Abdulla and McCarus 1967, McCarus 1997, Blau 2000, Thackston 2006, McCarus 2009). In the case of stems ending in *-ī* and *-ū*, there may be no phonological change, glide insertion, or vowel deletion (McCarus 1997, Blau 2000, Thackston 2006).

¹¹ In the Ardalānī variety of Central Kurdish, the plural suffix is realized as *-gal* in indefinite and deictic demonstrative phrases and as *-ān* in definite and anaphoric demonstrative phrases (Kalami 2020, this volume).

- (i) a. *sef-gal-èk* b. *aw sef-gal-á*
 apple-PL-INDF DIST apple-PL-DEF
 ‘some apples’ ‘those apples’ (deictic)
 (ii) a. *sef-ak-ān* b. *aw sef-ak-ān*
 apple-DEF-PL DIST apple-DEF-PL
 ‘the apples’ ‘those apples’ (anaphoric)

- (11) a. aw zhin-ān-á
DIST woman-PL-DEF
‘those women’
- b. aw birā-yān-á
DIST brother-PL-DEF
‘those brothers’

As in indefinite phrases, the ordering of the plural suffix with respect to the definite suffix is rigid in both types of definite phrases.

- (12) a. *zhin-ān-aká
woman-PL-DEF
- b. *aw zhin-á-yān
DIST woman-DEF-PL

Tahir (2018) and Haig (2019a) discuss the interaction between number and definiteness in Central Kurdish at length, as does Taghipour (2021) in Laki, a variety of Southern Kurdish.

2.3 Summary

Table 1 indicates the position of the plural, indefinite, and definite suffixes in different types of noun phrases.

Table 1. Noun phrase order

Indefinite	N-(ān)-èk N-(PL)-INDF
Definite (singular)	N-aká N-DEF
Definite (plural)	N-ak-ān N-DEF-PL
Demonstrative	aw N-ān-á DIST N-PL-DEF

In indefinite and demonstrative constructions, the plural suffix precedes the indefinite suffix *-èk* and the definite suffix *-á*, but in definite constructions, the plural suffix follows the (partial) definite suffix *-ak*. The variable position of the plural suffix is a fundamental issue in the syntax of the Central Kurdish noun phrase.

3 Modifiers

This section presents the behaviour of adjectives and attributive nouns in Central Kurdish, the form of the linking element in indefinite and definite noun phrases, and several ordering restrictions among modifiers.

3.1 Adjectives

Adjectives are postnominal in Central Kurdish and appear with an obligatory linking vowel known as *izāfa* (IZ) that is unstressed and attaches to the preceding constituent (MacKenzie 1961, Abdulla and McCarus 1967, Blau 2000, Thackston 2006, Karimi 2007, McCarus 2009, Öpengin 2016, Tahir 2018, Haig 2019b, Karim 2023).¹² This element is realized as the vowel *-ī* after consonants and as the glide *-y* after vowels.

The plural suffix *-gal* in (i) is derived from the noun *gal* ‘flock, herd, people’ (Thackston 2006: 184). The fact that the plural suffix has a distinct form and position in (ii) supports the view that *-ān* is the realization of both definiteness and plurality in Ardaġānī Kurdish, similar to *-hā* in Persian. We leave open to future research whether this observation may inform the analysis of number morphology in other varieties of Central Kurdish, including Silemānī.

¹² Tahir (2018) argues that *izāfa* is a clitic rather than a suffix, while other sources remain agnostic by using terms like “linking element” or “linker”, a practice that we follow.

- (13) a. sag-*(ī) bichūk
dog-IZ small
‘small dog’
- b. pishīla-*(y) gawra
cat-IZ large
‘large cat’

Adjectives can occur with their own modifiers, indicating their phrasal status.

- (14) a. sag-ī zor bichūk
dog-IZ very small
‘very small dog’
- b. pishīla-y zor gawra
cat-IZ very large
‘very large cat’

We gloss all linkers of the form *-ī* (*-y*) as *īzāfa*, including those that are found with possessors and arguments, as described in sections 5 and 6.

In indefinite noun phrases, adjectival modifiers follow the plural and indefinite suffixes.

- (15) a. zhin-ān-ī āzā
woman-PL-IZ brave
‘brave women’
- b. sag-èk-ī bichūk
dog-INDF-IZ small
‘a small dog’

It is not possible to invert the order of the modifier and either of these suffixes.

- (16) a. *zhin-ī āzā-yān
woman-IZ brave-PL
- b. *sag-ī bichūk-èk
dog-IZ small-INDF

The indefinite suffix in Central Kurdish differs from its counterparts in some Western Iranian languages in both its position relative to modifiers and its form. In Laki and Persian, for example, the indefinite suffix follows modifiers and has the form *-ī* (Ghomeshi 2003, Taghipour 2021, Ariyaei this volume).

In definite noun phrases, adjectives precede the plural and definite suffixes, and the linker has the form *-a* (MacKenzie 1961, Abdulla and McCarus 1967, Blau 2000, Thackston 2006, Karimi 2007, McCarus 2009, Öpengin 2016, Tahir 2018, Haig 2019b, Karim 2023).¹³ To facilitate discussion of the *-a* linker, we use a distinct gloss (LK) in this paper.

- (17) a. sag-a bichūk-ak-ān
dog-LK small-DEF-PL
‘the small dogs’
- b. pishīla zor gawra-k-ān
cat very large-DEF-PL
‘the very large cats’
- (18) a. aw sag-a bichūk-ān-á
DIST dog-LK small-PL-DEF
‘those small dogs’
- b. aw pishīla zor gawr-ān-á
DIST cat very large-PL-DEF
‘those very large cats’

As shown in (19), adjectives are rigidly ordered in relation to the plural and definite suffixes.

- (19) a. *sag-ak-ān-a bichūk
dog-DEF-PL-LK small
- b. *aw sag-ān-á bichūk
DIST dog-PL-DEF small

Some sources argue that the *-a* linker in (17) and (18) is an indication of compounding since it is identical in form to the linker that is found in many compounds (MacKenzie 1961, Blau 2000, Thackston 2006, McCarus 2009, Öpengin 2016, Haig 2019b). Another possibility is that *-a* is an allomorph of the *īzāfa*

¹³ In (17b), the *-a* linker is phonologically null after *pishīla* ‘cat’, a noun that ends in *-a* (MacKenzie 1961, Abdulla and McCarus 1967, Blau 2000, Thackston 2006). The *-a* linker may also be silent after stems ending in *-ā*, *-e*, and *-o*.

vowel, one that is conditioned by definiteness (Karimi 2007, Tahir 2018). In section 4, we examine the relation between the form of the linker and the interpretation of the modifier in detail.

The comparative degree of the adjective is formed using the suffix *-tir* (MacKenzie 1961; Abdulla and McCarus 1967; Blau 2000; Thackston 2006; McCarus 2007, 2009; Öpengin 2016; Tahir 2018). Like uninflected adjectives, comparative adjectives are postnominal and occur with a linker.

- | | |
|--|--|
| (20) a. zhin-ān-ī āzā-tir
woman-PL-IZ brave-CMPR
‘braver women’ | b. sag-èk-ī bichūk-tir
dog-INDF-IZ small-CMPR
‘a smaller dog’ |
| (21) a. sag-a bichūk-tir-aká
dog-LK small-CMPR-DEF
‘the smaller dog’ | b. aw sag-a bichūk-tir-á
DIST dog-LK small-CMPR-DEF
‘that smaller dog’ |

There are two ways of deriving the superlative degree of the adjective. The first, which is more common, is to add the suffix *-în* to the comparative form (MacKenzie 1961; Abdulla and McCarus 1967; Blau 2000; Thackston 2006; McCarus 2007, 2009; Öpengin 2016; Tahir 2018). Superlative adjectives are exceptional in that they precede the noun and do not need a linker.

- | | |
|---|--|
| (22) a. bichūk-tir-în sag
small-CMPR-SUP dog
‘the smallest dog’ | b. gawra-tir-în pishîla
large-CMPR-SUP cat
‘the largest cat’ |
|---|--|

Even though the prenominal superlative results in a definite reading, the definite suffix cannot be used.

- | | |
|--|---|
| (23) a. *bichūk-tir-în sag-aká
small-CMPR-SUP dog-DEF | b. *gawra-tir-în pishîla-ká
large-CMPR-SUP cat-DEF |
|--|---|

The second superlative construction places the morpheme *hara* before the adjective and does require the definite suffix (Blau 2000).

- | | |
|--|---|
| (24) a. sag-a hara bichūk-*(aká)
dog-LK SUP small-DEF
‘the smallest dog’ | b. pishîla hara gawra-*(ká)
cat SUP large-DEF
‘the largest cat’ |
|--|---|

The superlative formed with *hara* patterns like uninflected and comparative adjectives in that it is postnominal and appears with a linker.

3.2 Nouns

When nouns are used attributively, they follow the head noun and are preceded by an obligatory linker of the form *-î* or *-a* according to the definiteness of the noun phrase (MacKenzie 1961, Blau 2000, Karimi 2007, McCarus 2009, Öpengin 2016, Tahir 2018).¹⁴

- | | | | |
|---|---------------------|---|------------------|
| (25) a. kirās-*(î) katān
shirt-IZ cotton
‘cotton shirt’ | (Karimi 2007: 2160) | b. mez-*(î) āsin
table-IZ iron
‘iron table’ | (Tahir 2018: 19) |
|---|---------------------|---|------------------|

¹⁴ In some varieties of Central Kurdish, including Mukrî, attributive nouns may be marked with oblique case (MacKenzie 1961, Öpengin 2016, Tahir 2018).

Like adjectives, attributive nouns can have their own modifiers, confirming their phrasal status.

- (26) kirās-ī katān-ī mīsirī
shirt-IZ cotton-IZ Egyptian
'Egyptian cotton shirt'

Another property that attributive nouns share with adjectives is that their position differs in indefinite and definite phrases, as does the form of the linker. In indefinite phrases, attributive nouns follow the indefinite suffix, and the linker has the form *-ī*.

- (27) a. kirās-èk-ī katān
shirt-INDF-IZ cotton
'a cotton shirt'
- b. mez-èk-ī āsin
table-INDF-IZ iron
'an iron table'

In definite phrases, the modifier precedes the definite suffix, and the linker has the form *-a*.

- | | | |
|------|--|---|
| (28) | a. kirās-a katān-aká
shirt-LK cotton-DEF
‘the cotton shirt’ | b. mez-a āsin-ak-ān
table-LK iron-DEF-PL
‘the iron tables’ |
| (29) | a. aw kirās-a katān-á
DIST shirt-LK cotton-DEF
‘that cotton shirt’ | b. aw mez-a āsin-ān-á
DIST table-LK iron-PL-DEF
‘those iron tables’ |

As mentioned in section 3.1, the *-a* linker is the same as that which occurs in compounds, which are the focus of section 4.

3.3 Ordering restrictions

Nouns can be modified by more than one element provided that each is introduced by its own linker (MacKenzie 1961, Abdulla and McCarus 1967, Blau 2000, Thackston 2006, Karimi 2007, McCarus 2009, Öpengin 2016, Tahir 2018, Haig 2019b).

- (30) a. sag-*(ī) bichūk-*(ī) zard
dog-IZ small-IZ yellow
'small, yellow dog'
- b. pishīla-*(y) gawra-*(y) rash
cat-IZ large-IZ black
'large, black cat'

Depending on the semantics of the modifier, its ordering with respect to other modifiers may be flexible or rigid, though some cases are clearer than others.

Predicative adjectives are those that can appear in the copular construction in (31), where the property denoted by the adjective is predicated of the noun.

- (31) a. sag-aká āzā=ya.
dog-DEF brave=COP.3SG
'The dog is brave.'
b. sag-aká zīrak=a.
dog-DEF clever=COP.3SG
'The dog is clever.'

In general, predicative adjectives have flexible orderings, the difference being which adjective takes scope over the other. As shown in (32) and (33), the semantic difference between orderings may be negligible when modification is intersective.

- (32) a. sag-èk-ī āzā-y zīrak
dog-INDF-IZ brave-IZ clever
‘a clever, brave dog’
- b. sag-èk-ī zīrak-ī āzā
dog-INDF-IZ clever-IZ brave
‘a brave, clever dog’
- (33) a. sag-a āzā-ya zīrak-aká
dog-LK brave-LK clever-DEF
‘the clever, brave dog’
- b. sag-a zīrak-a āzā-ká
dog-LK clever-LK brave-DEF
‘the brave, clever dog’

If a noun is modified by a predicative adjective and an attributive noun, the ordering may also be flexible.

- (34) a. kirās-èk-ī katān-ī shīn
shirt-INDF-IZ cotton-IZ blue
‘a blue cotton shirt’
- b. kirās-èk-ī shīn-ī katān
shirt-INDF-IZ blue-IZ cotton
‘a blue cotton shirt’
- (35) a. mez-a āsin-a qurs-aká
table-LK iron-LK heavy-DEF
‘the heavy iron table’
- b. mez-a qurs-a āsin-aká
table-LK heavy-LK iron-DEF
‘the heavy iron table’

Note that the translations are identical in (34) and (35) because these types of modifiers have a fixed order in English.

Nonpredicative adjectives are so defined because they are incompatible with the construction in (33). Rather, they can only be used attributively within the noun phrase. An example of a nonpredicative adjective is *nāwakī* ‘nuclear’.

- (36) a. #fīzyānās-aká nāwakī=ya.
physicist-DEF nuclear=COP.3SG
Intended: ‘The physicist is nuclear.’
- b. fīzyānās-ī nāwakī
physicist-IZ nuclear
‘nuclear physicist’
- (37) a. fīzyānās-èk-ī nāwakī-y ganj
physicist-INDF-IZ nuclear-INDF young
‘a young nuclear physicist’
- b. #fīzyānās-èk-ī ganj-ī nāwakī
physicist-INDF-IZ young-IZ nuclear
Intended: ‘a nuclear young physicist’
- (38) a. fīzyānās-a nāwakī-ya ganj-aká
physicist-LK nuclear-LK young-DEF
‘the young nuclear physicist’
- b. #fīzyānās-a ganj-a nāwakī-aká
physicist-LK young-LK nuclear-DEF
Intended: ‘the nuclear young physicist’

Intensional adjectives like *peshū* ‘former’ and *dāhātū* ‘future’, which constitute a subset of nonpredicative adjectives, show exceptional behaviour in that they cannot occur inside of definiteness morphology. Instead, as illustrated in (40a) and (41a), these adjectives follow the definite suffix and appear with the *-ī* form of the linker.

- (39) a. #myuzīkzhan-aká peshū=ya.
musician-DEF former=COP.3SG
Intended: ‘The musician is former.’
- b. #pizhīshk-aká dāhātū=ya.
doctor-DEF future=COP.3SG
Intended: ‘The doctor is future.’
- (40) a. myuzīkzhan-aká-y peshū
musician-DEF-IZ former
‘the former musician’
- b. #myuzīkzhan-a peshū-aká
musician-LK former-DEF
Intended: ‘the former musician’

- (41) a. pizhīshk-aká-y dāhātū
 doctor-DEF-IZ future
 ‘the future doctor’
 b. #pizhīshk-a dāhātū-aká
 doctor-LK future-DEF
 Intended: ‘the future doctor’

These data indicate the need for additional research into the distribution and interpretation of the various types of adjectives in Central Kurdish.

Turning to comparative and superlative adjectives, these forms also have fixed orderings. Comparative adjectives must take scope over uninflected adjectives and thus occur further from the noun.

- (42) a. sag-èk-ī zard-ī bichūk-tir
 dog-INDF-IZ yellow-IZ small-CMPR
 ‘a smaller yellow dog’
 b. #sag-èk-ī bichūk-tir-ī zard
 dog-INDF-IZ small-CMPR-IZ yellow
 Intended: ‘a yellow smaller dog’
 (43) a. sag-a zard-a bichūk-tir-aká
 dog-LK yellow-LK small-CMPR-DEF
 ‘the smaller yellow dog’
 b. #sag-a bichūk-tir-a zard-aká
 dog-LK small-CMPR-LK yellow-DEF
 Intended: ‘the yellow smaller dog’

The same observation applies to the superlative construction that uses *hara*.

- (44) a. sag-a zard-a hara bichūk-aká
 dog-LK yellow-LK SUP small-DEF
 ‘the smallest yellow dog’
 b. #sag-a hara bichūk-a zard-aká
 dog-LK SUP large-LK yellow-DEF
 Intended: ‘the yellow smallest dog’

As for superlative adjectives ending in *-tirîn*, the ordering is not an issue since this superlative form obligatorily precedes the noun.

- (45) bichūk-tir-în sag-ī zard
 small-CMPR-SUP dog-IZ yellow
 ‘the smallest yellow dog’

The fact that comparative and superlative adjectives necessarily take scope over uninflected adjectives must be considered when seeking to account for the behaviour of modifiers in indefinite versus definite noun phrases in Central Kurdish.

3.4 Summary

The position of adjectives and attributive nouns in indefinite and definite noun phrases, as well as the form of the linker, is detailed in Table 2.

Table 2. Noun phrase order with modifiers (AP/NP)

Indefinite	N-èk-ī	AP/NP
	N-INDF-IZ	AP/NP
Definite	N-a	AP/NP-ak-ān
	N-LK	AP/NP-DEF-PL
Demonstrative	aw	N-a AP/NP-ān-á
	DIST	N-LK AP/NP-PL-DEF

In indefinite phrases, all modifiers follow the indefinite suffix, and the form of the linker is *-ī*, whereas in definite phrases, most modifiers precede the definite suffix, and the form of the linker is *-a*.

4 Compounds

This section explores nominal compounds in Central Kurdish, many of which contain a linker of the form *-a*, the same as that which precedes modifiers in definite noun phrases (MacKenzie 1961; Blau 2000; Thackston 2006; Karimi 2007; McCarus 2007, 2009; Öpengin 2016; Tahir 2018; Haig 2019b; Mustafa 2020; Abbas 2021). Compounds behave as a single phonological word in that the final syllable of the compound is stressed instead of the final syllable of each element (Hamid 2015, Öpengin 2016).

Nominal compounds that do not have a linker are predominantly head-final, such as the adjective-noun compounds in (46) and the noun-noun compounds in (47).

- | | | | | | | |
|------|----|--|-----------------------|----|--|---------------------|
| (46) | a. | spī-dār
white-tree
'aspen' | (Tahir 2018: 43) | b. | rash-mār
black-snake
'black snake' | (Abbas 2021: 87) |
| (47) | a. | darmān-khāna
medicine-house
'pharmacy' | (Thackston 2006: 178) | b. | mār-māsī
snake-fish
'eel' | (McCarus 2009: 627) |

For example, *spīdār* ‘aspen’ is a type of *dār* ‘tree’, and *darmānkhāna* ‘pharmacy’ is a type of *khāna* ‘house’, broadly construed. Furthermore, there are compounds that lack an identifiable head, as shown in (48).

- (48) a. sher-panja
lion-finger
'cancer' (Mustafa 2020: 111)
- b. sar-bāz
head-falcon
'soldier' (Mustafa 2020: 112)

In these cases, neither element describes the type of entity that the compound denotes.

Compounds that contain a linker can be head-final or head-initial. Of the adjective-noun compounds in (49) and the noun-noun compounds in (50), the first is head-final, while the second is head-initial.

- | | | | |
|---------|---|----|---|
| (49) a. | rash-a-bā
black-LK-wind
'violent wind' (McCarus 2007: 1048) | b. | kar-a-kewī
donkey-LK-wild
'zebra' (Tahir 2018: 44) |
| (50) a. | hawr-a-trīshqa
cloud-LK-lightning
'lightning' (MacKenzie 1961: 142) | b. | guḷ-a-bākh
flower-LK-garden
'rose' (Abbas 2021: 86) |

As these examples demonstrate, compounds with a linker can also have noncompositional meanings.

The fact that the *-a* linker in compounds is identical in form to the *-a* linker in definite noun phrases raises the possibility that nouns and their modifiers undergo a process of compounding in definite structures (MacKenzie 1961, Blau 2000, Thackston 2006, McCarus 2009, Öpengin 2016, Haig 2019b). An alternative view is that the *-a* linker that occurs with modifiers is an allomorph of *-ī* that is conditioned by definiteness (Karimi 2007, Tahir 2018). We contribute to the discussion by identifying several differences between compounding and modification that warrant further investigation.

First, compounds can have idiosyncratic meanings, such as those in (49) and (50), whereas modified nouns have compositional meanings. If the linker in idiosyncratic compounds is replaced with *īzāfa*, the compound either loses its special meaning or is no longer interpretable (Karimi 2007, Ahmadi 2021).

- (51) a. kar-ī kewī
donkey-IZ wild
'wild donkey'
- b. #guł-ī bākh
flower-IZ garden
Intended: 'garden flower'

Second, the nonhead of a compound may precede the head noun, as illustrated by *rash* ‘black’ in (49a) and *hawr* ‘cloud’ in (50a), but modifiers in noun phrases never precede the head noun, even if the phrase is definite and the *-a* form of the linker is used.

- (52) a. *bichūk-a sag-aká
small-LK dog-DEF
b. *katān-a kirās-aká
cotton-LK shirt-DEF

Third, modifiers that have flexible orderings in noun phrases have rigid orderings as compound-internal elements. For instance, the compound *karakewī* ‘zebra’ in (49b) contains the predicative adjective *kewī* ‘wild’, which is flexible in its ordering. However, for the idiosyncratic meaning of the compound to be preserved, *kewī* must immediately follow the noun, as in (53a). Once another element intervenes between *kar* and *kewī*, even in a definite noun phrase like (53b) where both linkers have the form *-a*, the special meaning is lost.

- (53) a. kar-a-kewī-ya pīr-aká
donkey-LK-wild-LK old-DEF
‘the old zebra’
b. kar-a pīr-a kewī-aká
donkey-LK old-LK wild-DEF
‘the wild, old donkey’

Fourth, compounds are indivisible in that the indefinite suffix cannot be positioned between the head noun and other elements that are internal to the compound.

- (54) a. kar-a-kewī-yèk
donkey-LK-wild-INDF
‘a zebra’
b. guł-a-bākh-èk
flower-LK-garden-INDF
‘a rose’

As one would expect based on the data in (54), the indefinite suffix appears between the compound and modifiers of the compound.

- (55) a. kar-a-kewī-yèk-ī pīr
donkey-LK-wild-INDF-IZ old
‘an old zebra’
b. guł-a-bākh-èk-ī jwān
flower-LK-garden-INDF-IZ pretty
‘a pretty rose’

Although these diagnostics show that true compound-internal elements behave differently than modifiers, they do not necessarily rule out the possibility of a more general compounding-like process in definite phrases, one where modifiers are added after elements that give rise to idiosyncratic meanings.

5 Possessors

Possessors, like modifiers, occur postnominally with a linker whose form is uniformly *-ī* (*-y*), hence its gloss as *īzāfa* (MacKenzie 1961, Abdulla and McCarus 1967, Blau 2000, Thackston 2006, Karimi 2007, McCarus 2009, Öpengin 2016, Tahir 2018, Haig 2019b).¹⁵

- (56) a. sag-*(ī) kazhāl
dog-IZ Kazhāl
‘Kazhāl’s dog’
b. pishīla-*(y) sherko
cat-IZ Sherko
‘Sherko’s cat’

Each additional possessor within the noun phrase must be preceded by its own linker, as in (57), a property that possessors share with modifiers.

¹⁵ Varieties of Central Kurdish that mark oblique case on attributive nouns may also do so on possessors, and vice versa (MacKenzie 1961, Öpengin 2016, Tahir 2018).

- (57) a. sag-*(ī) khwishk-*(ī) kzhāl
 dog-IZ sister-IZ Kazhāl
 ‘Kazhāl’s sister’s dog’
- b. pishīla-*(y) birā-*(y) sherko
 cat-IZ brother-IZ Sherko
 ‘Sherko’s brother’s cat’

Even though the nouns in (56) and (57) lack the definite suffix, they are interpreted as definite because the possessor is a proper name.¹⁶ This pattern is similar to that in (45), where there is no definite suffix and yet the noun phrase is interpreted as definite due to the prenominal superlative adjective. There are, however, at least two differences between possessors and prenominal superlative adjectives.

First, the indefinite suffix can be used in possessive constructions but not in superlative constructions.

- (58) a. sag-èk-ī kzhāl
 dog-INDF-IZ Kazhāl
 ‘a dog of Kazhāl’
- b. pishīla-yèk-ī sherko
 cat-INDF-IZ Sherko
 ‘a cat of Sherko’
- (59) a. #bichūk-tir-īn sag-èk
 small-CMPR-SUP dog-INDF
 Intended: ‘a smallest dog’
- b. #gawra-tir-īn pishīla-yèk
 large-CMPR-SUP cat-INDF
 Intended: ‘a largest cat’

Second, possessors do not prevent the use of the definite suffix, whereas prenominal superlative adjectives do. For ease of comparison, (23) is repeated in (61).

- (60) a. sag-aká-y kzhāl
 dog-DEF-IZ Kazhāl
 ‘Kazhāl’s dog’
- b. pishīla-ká-y sherko
 cat-DEF-IZ Sherko
 ‘Sherko’s cat’
- (61) a. *bichūk-tir-īn sag-aká
 small-CMPR-SUP dog-DEF
- b. *gawra-tir-īn pishīla-ká
 large-CMPR-SUP cat-DEF

Lastly, as shown by the word order in (58) and (60), the position of possessors does not vary in indefinite and definite noun phrases.

Due to the distinct ordering of modifiers and possessors relative to the indefinite and definite suffixes, there is no ambiguity when these suffixes are present.

- (62) a. sag-èk-ī āzā-y kzhāl
 dog-INDF-IZ brave-IZ Kazhāl
 ‘a brave dog of Kazhāl’
- b. sag-a āzā-ká-y kzhāl
 dog-LK brave-DEF-IZ Kazhāl
 ‘Kazhāl’s brave dog’

Even in the absence of the indefinite or definite suffix, modifiers always precede possessors. If this order is reversed, the phrase may have a different or anomalous interpretation.

- (63) a. sag-ī āzā-y kzhāl
 dog-IZ brave-IZ Kazhāl
 ‘Kazhāl’s brave dog’
- b. sag-ī kzhāl-ī āzā
 dog-IZ Kazhāl-IZ brave
 ‘brave Kazhāl’s dog’
- (64) a. kirās-ī katān-ī sherko
 shirt-IZ cotton-IZ Sherko
 ‘Sherko’s cotton shirt’
- b. #kirās-ī sherko-ī katān
 shirt-IZ Sherko-IZ cotton
 Intended: ‘cotton Sherko’s shirt’

¹⁶ This phenomenon is sometimes described as the inheritance or percolation of definiteness from a subconstituent of the noun phrase to its highest projection (Ritter 1991, Alexiadou 2005, Karimi 2007).

If the possessor is a noun, it can have its own indefinite or definite suffix. For the indefinite suffix to be possible on the possessor, the possessed noun must also be marked as indefinite.

- (65) a. sag-#(èk)-ī zhīn-èk
dog-INDF-IZ woman-INDF
‘a dog of a woman’
b. pishīla-#(yèk)-ī pyāw-èk
cat-INDF-IZ man-INDF
‘a cat of a man’

If, on the other hand, the possessor is definite, the possessed noun does not need its own definite suffix, as observed with the proper names in (56) and (57) and the definite possessors in (66).

- (66) a. sag-ī zhīn-aká
dog-IZ woman-DEF
‘the woman’s dog’
b. pishīla-y aw pyāw-ān-á
cat-IZ DIST man-PL-DEF
‘the cat of those men’

Still, it is possible for both the possessor and the possessed noun to be marked as definite.

- (67) a. sag-aká-y zhīn-aká
dog-DEF-IZ woman-DEF
‘the woman’s dog’
b. pishīla-ká-y aw pyāw-ān-á
cat-DEF-IZ DIST man-PL-DEF
‘the cat of those men’

These data suggest that possessors constitute their own determiner phrase within the extended projection of the possessed noun.

The word order of noun phrases that contain modifiers and possessors is given in Table 3.

Table 3. Noun phrase order with modifiers (AP/NP) and possessors (DP)

Indefinite	N-èk-ī AP/NP-ī DP			
	N-INDF-IZ AP/NP-IZ DP			
Definite	N-a AP/NP-ak-ān-ī DP			
	N-LK AP/NP-DEF-PL-IZ DP			
Demonstrative	aw N-a AP/NP-ān-á-y DP			
	DIST N-LK AP/NP-PL-DEF-IZ DP			

Possessors follow modifiers, and if the noun is overtly marked as indefinite or definite, they follow the indefinite and definite suffixes as well. Therefore, possessors have the same position in indefinite and definite noun phrases.

6 Arguments

Some nouns assign thematic roles like agent, patient, and theme, which include the monomorphemic nouns in (68). If there is a single argument, it can be expressed using the *īzāfa* construction.¹⁷

- (68) a. wasif-*(ī) kazhāl
description-IZ Kazhāl
‘Kazhāl’s description’
‘the description of Kazhāl’
b. wena-*(y) sherko
picture-IZ Sherko
‘Sherko’s picture’
‘the picture of Sherko’

The proper names in (68) can be interpreted as agents or themes depending on the context. Since the head noun is not overtly marked as indefinite, the noun phrase inherits the definiteness of the argument, as it

¹⁷ Like attributive nouns and possessors, arguments may be marked with oblique case in other varieties.

does with possessors. If the head noun is overtly marked as indefinite or definite, as in (69) and (70), this marking determines the overall interpretation of the noun phrase.

- (69) a. wasif-èk-ī zhin-èk
 description-INDF-IZ woman-INDF
 ‘a description of a woman’
 b. wena-yèk-ī pyāw-aká
 picture-INDF-IZ man-DEF
 ‘a picture of the man’
- (70) a. wasif-aká-y aw zhin-ān-á
 description-DEF-IZ DIST woman-PL-DEF
 ‘the description of those women’
 b. wena-k-ān-ī pyāw-èk
 picture-DEF-PL-IZ man-INDF
 ‘the pictures of a man’

Arguments follow all modifiers, even in indefinite phrases like (71a).

- (71) a. wasif-èk-ī rûn-ī zhin-èk
 description-INDF-IZ clear-IZ woman-INDF
 ‘a clear description of a woman’
 b. wena bâsh-aká-y pyāw-aká
 picture good-DEF-IZ man-DEF
 ‘the good picture of the man’

If a noun has more than one argument, the first appears with a linker, and the second is expressed using an adpositional phrase. If the agent follows the patient or theme, it is contained within the circumposition *lalāyan...awa* ‘by’.

- (72) a. wasif-èk-ī rûn-ī māl-aká lalāyan zhin-aká-wa
 description-INDF-IZ clear-IZ house-DEF by woman-DEF-by
 ‘a clear description of the house by the woman’
 b. wasif-a rûn-aká-y māl-aká lalāyan zhin-aká-wa
 description-LK clear-DEF-IZ house-DEF by woman-DEF-by
 ‘the clear description of the house by the woman’

If the patient or theme follows the agent, it is introduced by a semantically appropriate adposition.

- (73) wasif-a rûn-aká-y zhin-aká darbāra-y māl-aká
 description-LK clear-DEF-IZ woman-DEF about-IZ house-DEF
 ‘the woman’s clear description of the house’

As shown in Table 4, the Central Kurdish noun phrase has the following order: noun, modifier, argument.¹⁸

Table 4. Noun phrase order with modifiers (AP/NP) and arguments (DP/PP)

Indefinite	N-èk-ī AP/NP-ī DP PP			
	N-INDF-IZ AP/NP-IZ DP PP			
Definite	N-a AP/NP-ak-ān-ī DP PP			
	N-LK AP/NP-DEF-PL-IZ DP PP			
Demonstrative	aw N-a AP/NP-ān-á-y DP PP			
	DIST N-LK AP/NP-PL-DEF-IZ DP PP			

If there is more than one argument, the first is introduced by *lāzāfa* and the second by an adpositional phrase. In Table 4, we use the label “PP” for adpositional phrases to distinguish them from adjective phrases.

¹⁸ Atlamaz (2016) discusses the ordering of modifiers, possessors, and arguments in Northern Kurdish and Persian, two languages that are related to Central Kurdish.

Finally, there are nouns like *bochūn* ‘opinion’ that take clausal rather than nominal themes, which also follow the head noun and are preceded by *īzāfa*.

- (74) *bochūn-a bāw-aká-(y) ka sag bawafā=ya*
 opinion-LK common-DEF-IZ COMP dog loyal=COP.3SG
 ‘the common opinion that dogs are loyal’

Restrictive relative clauses pattern like clausal themes in that the linker is obligatory, whereas nonrestrictive relative clauses do not require a linker.

- (75) a. *sag-a bichūk-ak-ān-*(ī) ka á-wař-in*
 dog-LK small-DEF-PL-IZ COMP PROG-bark-3PL
 ‘the small dogs that are barking’
 b. *sag-a bichūk-ak-ān, ka hamū á-wař-in*
 dog-LK small-DEF-PL COMP all PROG-bark-3PL
 ‘the small dogs, which are all barking’

As indicated by the comma in (75b), nonrestrictive relative clauses follow a prosodic break.

7 Conclusion

In this paper, we have presented the distribution of modifiers, possessors, and arguments in the Central Kurdish noun phrase, the linking vowels that are used with these elements, and their relative ordering both with respect to one another and to number and definiteness morphology. Only modifiers exhibit sensitivity to the definiteness of the noun phrase. In indefinite phrases, modifiers appear outside of number and definiteness with a linker of the form *-ī*, while in definite phrases, modifiers appear inside of number and definiteness with a linker of the form *-a*. The only exception to this generalization are intensional adjectives like *peshū* ‘former’ and *dāhātū* ‘future’. Like possessors and arguments, intensional adjectives occur outside of number and definiteness with the *-ī* linker.

The distinct position of modifiers in definite constructions raises questions regarding the identity of the *-a* linker. One possibility is that a process of compounding takes place between nouns and their modifiers in definite phrases, and another is that the *-a* linker is an allomorph of *-ī* that is conditioned by definiteness. A second issue that requires further research is the variable position of the plural suffix in indefinite, definite, and demonstrative noun phrases, particularly its occurrence after the definite suffix *-ak*. We hope that the examples and discussion in this paper prove useful for future work on these topics and other phenomena related to the Central Kurdish noun phrase.

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