

Chapter 1

Zagros region: The Kurdish-Gorani continuum

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This chapter investigates the word order configuration of three Kurdish dialects confined within the Zagros mountains of western Iran: Gorani Gawraju; Central Kurdish Sanandaj; Southern Kurdish Bijar. These dialects share the commonality of having OV and Verb-Goal in their constituent ordering. However, the Gorani epicentre is characterised by extending post-predicate placement to Addressees, light-verb complements, and Locational complements in copular clauses. It will be argued that Central Kurdish dialects with post-predicate tendency for the above-mentioned constituents reflect a Gorani substrate.

1 Introduction

This chapter investigates the word order profiles of three Kurdish varieties spoken in the mountainous Zagros regions of Western Iran. The term Kurdish here refers both to the varieties that are “linguistically” considered Kurdish, i.e. Central Kurdish, Southern Kurdish, and Northern Kurdish and to the closely related but genetically more divergent languages Gorani and Zazaki that are considered Kurdish in the broader ethnic and socio-cultural sense of the term. The Kurdish languages belong to the North-western branch of Iranian languages, along with Taleshi, Tati, Mazandarani, Balochi and others.

The Kurdish varieties investigated in this study include the following: Gorani Gawraju, Central Kurdish of Sanandaj region, and Southern Kurdish Bijar. These dialects are representative of Kurdish languages in Western Iran—and at least in the case of the Central Kurdish dialect spoken around Sanandaj – previous scholarship has identified a greater degree of influence from Gorani than in other

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varieties of Kurdish (see below). This chapter focuses on word order and considers the possible effects of Gorani on this domain of syntax. To better assess the extent of Gorani influence, we will also consider three additional varieties as control languages: Hawrami Takht, a representative of a more conservative variety of Gorani, and two varieties of Central Kurdish, Mukri and Bingird, as representatives of Kurdish varieties outside immediate Gorani influence. Figure 1 illustrates the localities in which these varieties are spoken.

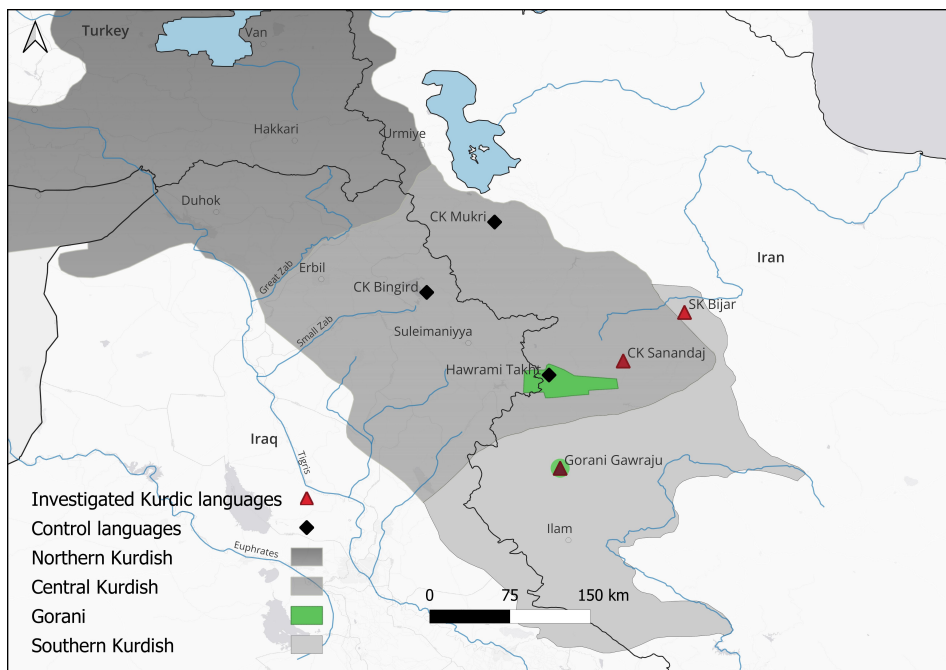


Figure 1: Investigated Kurdish dialects and control languages

The investigated dialects are situated at the intersection of Southern Kurdish and Central Kurdish-speaking areas. This intersection zone was once the Gorani heartland, which has since contracted to the mountainous Hawraman region and a few pockets across the region. There are accounts of language shift from Gorani to Kurdish in the Sanandaj region (see §4). This motivates studying the dialects in this region to see what the effects of such an assumed shift are on the word order profile of individual Central Kurdish dialects and whether it has any bearing on the classification of Central Kurdish dialects. There are now studies tackling this second aspect: Mohammadirad (In press) is a study of the organisation of inflectional paradigm in the periphery of the verb within Central Kurdish dialects. The author shows that the Southern Central Kurdish dialects adopt the

Gorani pattern of (bound) argument ordering in the verbal periphery, whereas the Northern Central Kurdish dialects opt for the opposing ordering. [Mohammadirad \(2024\)](#) is a case study of the Gorani substrate features in the Central Kurdish dialect of the Sanandaj area across the whole grammar. The choice of the three doculects for this study is also motivated by the fact that Kurdish vernaculars in this region have remained unstudied with respect to their word order properties (see §2).

The Gorani substrate hypothesis will be explored further in §4. It will be seen that the Gorani substrate can explain some of the differences in word order configuration in this region, which has contributed to a north/south continuum in Central Kurdish word order. The northern half concerns the Mukri and Erbil dialects (to which Southern Kurdish Bijar matches in word order). In contrast, the southern half is relevant for the Gorani zone of influence and contains the Central Kurdish Sanandaj (and possibly neighbouring Southern Kurdish varieties). Nonetheless, it should be noted that the number of data points, i.e., doculects, for this study is low, leading to the tentative nature of conclusions.

The Kurdish dialect of Bijar, also labelled Garrousi, lies at the northernmost edge of the Southern Kurdish speech zone. It is adjacent to Central Kurdish Mukri dialects to the northwest, Sanandaj-type Central Kurdish dialects to the southwest, and Azeri Turkish dialects to the east. Earlier works on the Southern Kurdish dialect of Bijar include small grammatical notes in [De Morgan \(1904\)](#) and [Fattah \(2000\)](#), and a vocabulary list in [Querry \(1896\)](#). It is assumed that the Southern Kurdish Bijar is the result of migration from around Ilam, situated further to the south in Zagros mountains ([Fattah 2000](#): 18).

Gawraju is a small village in the north of Kermanshah, western Iran, since destroyed due to a dam building in the region. Its Gorani dialect has been described in [Mahmoudveysi et al. \(2012\)](#), and especially in [Bailey \(2018\)](#). The dialect is at the periphery of Gorani dialects and has been Kurdicised to a great degree; for instance, nominal case and gender marking are lost in Gorani Gawraju, contrary to the more conservative Gorani dialects.

The Kurdish dialect of the Sanandaj area is one of the southernmost dialects of Central Kurdish. The dialect is generally referred to as Aardalani when referring to the vernacular of Sanandaj itself and Laylakhi when referring to the vernaculars to the east of the Sanandaj region. Earlier work on Central Kurdish Sanandaj is restricted to [De Morgan's](#) (1904) grammatical notes. More recently, the dialect has been described in more detail within the language contact setting in Sanandaj ([Khan & Mohammadirad 2024](#)).

The data for all three dialects are from unscripted spoken narratives that were collected by the author (in the case of Kurdish Sanandaj and Kurdish Bijar) or

imported from existing studies in the case of Gorani of Gawraju. The recordings were transcribed, translated, and analysed using the WOWA framework (Haig et al. 2024 [this volume]); see Table 1 for an overview of sources and corpus size.

Table 1: Datasets from the WOWA corpus discussed in this chapter

Doculect	Speakers	Total tokens	Analysed tokens	Source
CK Sanandaj	8	1199	1180	Mohammadirad 2022b
SK Bjiar	3	1187	1150	Mohammadirad 2022c
G Gawraju	3	1325	1015	Mohammadirad 2022a based on Mahmoudveysi et al. 2012; Bailey 2018

The chapter pursues two main objectives: (i) an overview of post-predicate syntax in a sample of three doculects from the Zagros region. (ii) arguing for a Gorani substrate as an explanation for some of the differences found in this region, which has contributed to a north/south continuum in Central Kurdish word order. Applying a gradient corpus-based approach, this paper showcases the effect of language shift through Gorani substrate in contributing to the formation of a north/south continuum in the word order profile of the Central Kurdish dialects. More precisely, I suggest that the shift from Gorani to Kurdish and/or high bilingualism in Gorani in the Sanandaj region has led the Central Kurdish dialect of Sanandaj to be strikingly different in some of the post-predicate syntax from the Central Kurdish dialects in the North, e.g. Mukri. It should be noted, though, that the status of Gorani Gawraju is hard to reconcile with point (ii). As will be seen in §4, it has been Kurdicised to a large degree and cannot be regarded as an assumed original state of a Gorani dialect once spoken in the region.

This chapter is structured as follows. §2 gives an overview of the literature on post-predicate arguments across Kurdish. §3 classifies major word order parameters across the three investigated Kurdic dialects. §4 outlines areal issues in the configuration of certain word order profiles. §5 is the conclusion.

2 Previous scholarship on post-predicate arguments in Kurdish

Haig (2015) is the first study on the ordering of “Goals” across Kurdish dialects in the context of contact with the north-eastern branch of Neo-Aramaic dialects,

commonly called NENA. In Haig’s earlier (2015) terminology, “Goal” was used as a cover term encompassing human and non-human arguments of verbs of movement, recipients of verbs of transfer, and Addressees of verbs of speech. These are all constituents that share “endpoint semantics.”¹ Haig concludes that all Kurdish varieties share the commonality of post-predicate realisation of goals of verbs of movement and recipients of the verb ‘give,’ a head-initial trait which may be linked to an earlier imprint of Aramaic on Kurdish languages in their formative stages.

The main distinction between Kurdish dialects, according to Haig, is in finer-grained differences regarding the placement of Addressees (see also Haig 2017) and beneficiaries. Haig makes the important observation that post-predicate Goals are more prevalent across Kurdish dialects where there is a greater intensity of NENA speaking communities.² Thus, within Northern Kurdish, the dialects to the south-east of Anatolia/northern Iraq, which have been in close contact with vernaculars of NENA for centuries, show more post-predicate realisation than Zazaki and other Kurdish varieties in Central Anatolia, which show contact influence from Turkish and Armenian, and have the basic pattern of pre-predicate positioning for Addressees of verbs of speech. More recent research on larger samples from Kurdish and neighbouring languages has confirmed the preferred post-verbal placement of goals of verbs of motion and recipients, but some of the details regarding other roles have been revised in the light of additional data, see Haig (2022), Haig et al. 2024 [this volume], and Section 3 below.

A relevant publication is Asadpour’s (2022a) dissertation on word order variation within Kurdish languages in north-western Iran in contact with non-Iranian languages Neo-Aramaic, and Turkic. Asadpour (2022b) is another work on word order variation in Kurdish. His paper focuses on “incorporated targets” in the Mukri variety of Central Kurdish. By incorporated targets, the author means Goal-like arguments that appear between the constituting elements of a complex predicate, namely the non-verbal element and the light verb, for example, *min* ‘1SG’ in *wilām=ī min=ī dā-w=a* [answer=EZ 1SG=3SG:A give.PST-PTCP=PERF] ‘He gave an answer to me.’ The author concludes that the variant ordering of incorporated targets in Mukri is accounted for by factors such as animacy and length, which favour the preverbal position.

¹In more recent work, the inclusive use of the term ‘Goal’ has been abandoned, and ‘Goal’ is reserved exclusively for endpoint arguments of verbs of movement (see Haig et al. 2024 [this volume]).

²This is now statistically demonstrated in a recent study (Haig et al. In press): The Northern Kurdish dialect spoken in Ankara shows less tendency for post-predicate realisation of Goals than Kurdish varieties in the immediate contact zone with NENA dialects.

In short, previous scholarship has mainly taken a broader perspective on the effects of language contact on the word order profile of Kurdish. Central Kurdish dialects, in general, and especially the Gorani zone of influence corresponding to the south of Central Kurdish speech zone, have remained understudied with regard to their word order properties. Given this background, this chapter attempts to provide a more focused case study of language contact and word order within Kurdish, in particular, the southeasterly periphery.

3 Word order parameters

Barring a few features, e.g., OV order, the word order parameters across the investigated dialects are predominantly head-initial.

3.1 Adjective/noun

In the investigated dialects, attribution in the noun phrase is formed by placing the adjective following the head noun through a sort of head-marking formative called *ezafe*, which has different forms depending on the status of the head noun being indefinite (1.a-1.b)³, or definite (1.c)⁴

- (1) a. Gorani Gawraju (Mohammadirad 2022a: E, 0770)
 žan=e žwān-ēk
 woman=EZ young-INDF
 ‘a young woman’
- b. Southern Kurdish Bijar (Mohammadirad 2022c: B, 0166)
 sag=e sīya=y zil-aka-y
 dog=EZ black=EZ big-SPEC-INDF
 ‘a big black dog’
- c. Central Kurdish Sanandaj (Mohammadirad 2022b: A, 0065)
 kanišk=a gawra-(a)ka
 girl=EZ old-DEF
 ‘the older girl’

³Alternatively, the adjective can be linked to the head noun through juxtaposition, e.g., Southern Kurdish Bijar *usāswār xās-ē* ‘a good horse-riding master’ (Mohammadirad 2022c: D, 0285).

⁴The *ezafe* particle =*a*, generally dubbed “compound *ezafe*,” is a feature of all Central Kurdish, Southern Kurdish, and Gorani dialects but absent in the majority of Northern Kurdish dialects (cf. MacKenzie 1962: 83).

While the default pattern remains head-initial in adjective-noun constructions, these dialects show minor traces of head-final syntax in a few closely-knit compound NPs. Here, the *ezafe* linker appears on the adjective and has the form of *=a* similar to (1c):

- (2) Gorani Gawraju, Central Kurdish Sanandaj, and Southern Kurdish Bijar
juwān=a žin
 beautiful=EZ woman
 ‘beautiful woman’

3.2 Possessor/possessed

In the investigated dialects, the structure of possessive constructions is possessed first, possessor second. The unmarked pattern for linking the possessor to the possessed noun is through simple juxtaposition in Gorani Gawraju and Central Kurdish Sanandaj, but via *ezafe* linker in Southern Kurdish Bijar:

- (3) a. Gorani Gawraju (Mohammadirad 2022a: A, 0175)
dim pišī-aka
 tail cat-DEF
 ‘the tail of the cat’
 b. Central Kurdish Sanandaj (Mohammadirad 2022b: G, 0714)
kanišk pāwšā
 daughter king
 ‘the king’s daughter’
 c. Southern Kurdish Bijar (Mohammadirad 2022c: D, 0318)
zārū=e pādīšā=y maymün-ān
 child=EZ king=EZ monkey-PL
 ‘the child of the king of monkeys’

3.3 Demonstrative/noun

In all the three dialects, the demonstrative attributives are discontinuous: they consist of the demonstrative attributes, sensitive to distance distinction, to the left of the head noun, and the invariable deictic form *=a* which attaches to the rightmost boundary of the NP, see Table 2 for Gorani forms. Thus, the order of demonstrative plus the head noun cannot be readily classified as fitting into either head-initial or head-final syntax.

Table 2: Demonstrative attributes in Gorani Gawraju (Bailey 2018: 169, simplified)

	Proximal	Distal
SG/PL	\bar{i} a	\bar{a} a

- (4) a. Gorani Gawraju (Mohammadirad 2022a: B, 0334)
 \bar{i} $bizin=a$
 DEM.PROX goat=DEIC
 ‘this goat’
- b. Gorani Gawraju (Bailey 2018: 170)
 \bar{a} $k\bar{a}r-\bar{a}n=a$
 DEM.DIST task-PL=DEIC
 ‘those tasks’

3.4 Numeral/noun

The investigated varieties share the commonality of ordering the numerals before head nouns. Morphologically, the head noun does not show number agreement with numerals above ‘one.’ Examples:

- (5) a. Gorani Gawraju (Mohammadirad 2022a: B, 0237)
 $d\ddot{u}$ $wa\check{c}ka$
 two offspring
 ‘two offsprings’
- b. Central Kurdish Sanandaj (Mohammadirad 2022b: A, 0001)
 $s\bar{e}$ $ku\check{r}$
 three son
 ‘three sons’
- c. Southern Kurdish Bijar (Mohammadirad 2022c: H, 1148)
 $ha\check{s}$ $k\bar{i}sa$
 eight sack
 ‘eight sacks’

Taken together, in the investigated Kurdish languages, the structure of NP is DEM NUM N ADJ, e.g. Central Kurdish Sanandaj. $aw\ s\bar{e}\ kani\check{s}k\ zar\bar{i}f=a$ [DEM.DIST three girl beautiful=DEIC] ‘those three beautiful girls.’

3.5 Adpositions

A mixed adpositional typology is a common feature of most Kurdish varieties. This is a reflection of their geographical distribution between OV languages, e.g. Armenian, Turkic, Caucasian, and VO languages, e.g. Arabic, Aramaic (cf. [Stilo 2009](#): 6–7). The Kurdish dialects investigated here are no exception, though the levels of postpositionality differ significantly in these dialects (see §3.20). Therefore, prepositions, postpositions, and circumpositions occur in these dialects. It is thus not straightforward to categorize these dialects easily into head-initial vs. head-final types.

- (6) a. Central Kurdish Sanandaj ([Mohammadirad 2022b](#): B, 0261)
bo šār
to town
‘to the town’
- b. Central Kurdish Sanandaj ([Mohammadirad 2022b](#): A, 0010)
la kēf řaş=ā
in mountain black=POST
‘at the black mountain’
- c. Central Kurdish Sanandaj ([Mohammadirad 2022b](#): K, 1160)
das a-nē-t=a žin-ak(a)=aw
hand IND-put.PRS-3SG:A=DRCT woman-DEF=POST
‘She nudged the woman.’

3.6 Auxiliary/main verb

Given the breadth of the subject, this section only deals with auxiliary verbs in progressive constructions,⁵ which precede the main verb, in contrast to the tendency in OV languages ([Dryer 1992](#): 100).

- (7) a. Central Kurdish Sanandaj ([Mohammadirad 2022b](#): D, 0449)
xarīk=a jift a-kā
AUX=COP.3SG:S plough IND-do.PRS.3SG:A
‘He is ploughing.’
- b. Gorani Gawraju ([Mahmoudveysi et al. 2012](#): 43)
tū hē=t kār ma-kar-ī
2SG PTCL=2SG:A work IND-do.PRS-2SG:A
‘You are working.’

⁵The more archaic auxiliaries, such as various forms of the verb ‘to be’, are now unverbated with the lexical verb, and cannot be readily analysed as head-final auxiliaries.

3.7 Complement clause/matrix verb

The complement clause follows the matrix verb in the investigated dialects. The complementation strategy is generally asyndetic without any connective particles.

- (8) a. Southern Kurdish Bijar (Mohammadirad 2022c: F, 0848)
na-zānist *ča* *kirdī=ya*
NEG-know.PST.3SG:A what do.PST.PTCP.3SG:A=PERF
'He didn't know what he had done.'
- b. Central Kurdish Sanandaj (Mohammadirad 2022b: D, 0444)
wā *a-zān-ē* *a=y-xwā*
DEIC IND-know.PRS-3SG:A IND=3SG:O-eat.PRS.3SG:A
'He thought it (the wolf) would eat him.'
- c. Gorani Gawraju (Mohammadirad 2022a: C, 0396)
ma-wīn-ē *hüč* *nīya* *b-war-ē*
IND-see.PRS-3SG:A nothing NEG.COP.3SG:S SBJV-eat.PRS-3SG:A
'He sees that there is absolutely nothing he may eat.'

3.8 Position of complementizer within the complement clause

As remarked, complement clauses are not usually introduced by complementizers. However, the corpus data shows that young, educated speakers tend to use the complementizer *ki*, *ka* in the initial position of some complement clauses. Kurdish varieties thus pattern with VO languages in this regard, as do all other Western Asian varieties of Iranian.

- (9) a. Southern Kurdish Bijar (Mohammadirad 2022c: H, 1062)
zānist *ki* *bār-a=y* *sangīn=a*
know.PST.3SG:A COMP load-DEF=3SG:POS heavy=COP.3SG:S
'He (the man) knew that its (the donkey's) load was heavy.'
- b. Central Kurdish Sanandaj (Mohammadirad 2022b: B, 0278)
na=y-hēšt *ka* *hamro-akān bi-diz-ē*
NEG=3SG:A-let.PST COMP pear-DEF.PL SBJV-steal.PRS-3SG:A
'He didn't let him steal the pears.'
- c. Gorani Gawraju (Bailey 2018: 424)
ni-m-wāz-ē *ka* *bi-zān-ē*
NEG-IND-want.PRS-3SG:A COMP SBJV-know.PRS-3SG:A
'He doesn't want to know.'

3.9 Nominal direct object/verb

Kurdish languages are generally claimed to have basic OV word order (see [McCarus 2009](#): 613 and [Öpengin 2016](#): 51 for Central Kurdish; [Fattah 2000](#): 672 for Southern Kurdish; [Mahmoudveysi & Bailey 2013](#): 72 for Gorani Zarda). Table 3 summarizes the OV ratio of nominal direct objects for each doculect.

Table 3: Frequencies of post-verbal (Po) nominal direct objects

	G Gawraju			CK Sanandaj			SK Bijar		
	<i>n</i>	<i>n</i> Po	Po	<i>n</i>	<i>n</i> Po	Po	<i>n</i>	<i>n</i> Po	Po
Direct object	285	13	5%	316	3	1%	298	7	2%

It can be seen that Kurdic varieties are predominantly OV, in line with the claims made in the literature. Nonetheless, it is noteworthy that Gorani Gawraju allows nominal direct objects to be placed after the verb at a relatively higher rate than Central Kurdish and Southern Kurdish. This might be a reflection of earlier contact between Gorani vernaculars and Semitic languages, such as Arabic and Aramaic. Note, however, that the absolute numbers of postverbal objects in Gorani Gawraju are very small (13). One might even consider a contact effect from Persian here. Post-verbal direct objects in Gorani are overwhelmingly definite (11 out of a total of 13 post-verbal objects) and could be reconciled with some notion of afterthought.). In addition, they are usually arguments of the verb ‘lift, grasp,’ which is then followed by the directional particle.⁶

- (10) a. Gorani Gawraju ([Mohammadirad 2022a](#): D, 0677)

ānī ma-nam=ya qutāng
 3SG IND-lift.PRS.3SG:A=DRCT pickaxe
 ‘He (Farhad) grasps (lit. lift) the pickaxe.’

- b. Gorani Gawraju ([Mohammadirad 2022a](#): D, 0685)

tamāšā=m xās na-kard-ē fask-akān
 looking=1SG:A well NEG-do.PST-PTCP picture-DEF.PL
 ‘I have not looked very well at the pictures.’

- c. Gorani Gawraju ([Mohammadirad 2022a](#): D, 0566)

ma-wīn-ē ī dawrīš-a
 IND-see.PRS-3SG:A DEM.PROX dervish-DEIC
 ‘She sees this dervish.’

The role of definiteness in licensing post-verbal objects in otherwise OV languages has been noted in several contributions to this volume; for instance, in Persian, see Rasekh-Mahand et al. (2024 [this volume]) and Parizadeh & Rasekh-Mahand (2024 [this volume]). Given the overall low frequency of post-verbal objects, it is hard to make a generalization about the effect of humanness vs. non-humanness in the VO configuration.

3.10 Pronominal direct object/verb

Similarly, OV is the preferred order for free pronoun direct objects; see examples in (11a-11b). Note that the number of tokens does not exceed 10 in each dataset, which precludes a premature conclusion on the word order configuration of free pronouns. The main reason for the low frequency of free pronouns as direct objects seems to be that a direct object is often indexed by a bound pronoun in these languages, which is in complementary distribution with free pronouns.

- (11) a. Gorani Gawraju (Mohammadirad 2022a: E, 0920)
tu min=it kušt
2SG 1SG=2SG:A kill.PST
'You killed me.'
- b. Southern Kurdish Bijar (Mohammadirad 2022c: D, 0457)
wāna san-ī
3PL buy.PRS-3SG:A
'He buys them.'

3.11 Copula complements

Complements of copular verbs show a high propensity to be placed pre-verbally. They exhibit less than 10% of post-verbal realisation across three datasets (with Gorani having the highest rate of post-predicate copula complements due to

⁶Likewise, a special VO syntax is associated with the verb *rāhištīn* 'to lift' in Kurmanji dialects. However, the issue seems to be more complicated in Gorani. In the closely related Hawrami varieties, the verb *namāy* 'to lift' is intransitive, but its non-subject argument always appears post-verbally. On the other hand, assuming that the directional particle in (10a) flags a direct object, then this could be linked to an Aramaic influence, as noted by Don Stilo (p.c). In Khan's (2009) description of the Neo-Aramaic dialect of Sanandaj, it is mentioned that a minor strategy for marking direct objects is to use an allative strategy. However, unlike Gorani, the direct object precedes the verb. This could mean that the allative strategy for direct objects in Gorani and Kurdish is a secondary pattern borrowed from NENA but used for very specific/restricted contexts.

semi-poetic language in one of the tales). At any rate, copula complements align with direct objects in having predominantly pre-predicate placement, as noted for all other OV languages in the WOWA data set.

- (12) a. Central Kurdish Sanandaj (Mohammadirad 2022b: B, 0543)
fra wiryā a-w-ē
 very clever IND-be.PRS-3SG:S
 ‘She was very clever.’
- b. Gorani Gawraju (Mohammadirad 2022a: C, 0524)
ēma řafīq bīs-yām
 1PL friend be.PST-1PL:S
 ‘We were friends.’
- c. Southern Kurdish Bijar (Mohammadirad 2022c: D, 0278)
žin-a=y dugīyān d-ū
 wife-DEF=3SG:POS pregnant IND-be.PRS.3SG:S
 ‘His wife was pregnant.’

3.12 Goal/verb

Haig (2015, 2022) suggests that within Kurdish goals of verbs of movement (e.g., ‘go,’ ‘come’) and goals of verbs of caused motion (e.g. ‘put,’ ‘take’) have the highest propensity to occur in the post-predicate position among endpoint constituents. Table 4 exhibits the linear position of Goals and Caused goals relative to the verb.

Table 4: Frequencies of post-verbal (Po) Goals in three Kurdic doculects

	G Gawraju			CK Sanandaj			SK Bijar		
	<i>n</i>	<i>n</i> Po	Po	<i>n</i>	<i>n</i> Po	Po	<i>n</i>	<i>n</i> Po	Po
Goals (simple)	158	148	94%	183	162	88%	181	172	95%
Goals (caused)	105	103	98%	150	144	96%	121	117	97%
All Goals	263	251	96%	333	306	92%	302	289	96%

As can be seen from Table 4, overall Goals show more than 90% post-predicate realisation. This has been claimed to reflect the convergence of these Kurdic dialects with Semitic languages (cf. Haig et al. In press). It is notable that Goals slightly lag behind Caused goals in post-predicate realisation. Pre-verbal Goals

in these varieties occur often with some notion of “refined motion,” which often expresses atelicity, see (13a), whereas caused goals express more clearly an endpoint to the action of the verb, thus post-verbal, cf. (13b).

- (13) a. Southern Kurdish Bijar (Mohammadirad 2022c: H, 1128)
waraw samt=i bāzār du-řī-yā-n
 to direction=EZ bazaar IPFV-go.PST-IPFV-3PL:S
 ‘They were going in the direction of bazaar.’
- b. Southern Kurdish Bijar (Mohammadirad 2022c: D, 0476)
siqān-a nīyā war saw=aw
 bone-DEF put.PST.3SG:A front dog=POST
 ‘She put the bone in front of the dog.’

3.13 Complements of ‘become’

Within the investigated Kurdish dialects, the inchoative verb ‘become’ has a special syntax. It implies a change of state, e.g. ‘He became a king.’ The verb ‘become’ has an identical morphology as ‘be,’ but unlike the latter, the complement of ‘become’ is usually realised post-predicatively, if it is a NP. Adjective complements of ‘become,’ on the other hand, are generally pre-verbal. The examples in (14) illustrate the placement of nominal complements. It is notable that the nominal complement of inchoative ‘become’ is flagged by the preposition *ba*, cf. (14b), which can be and is often cliticised to the verb and glossed as DRCT (directional particle).

- (14) a. Gorani Gawraju (Mohammadirad 2022a: E, 0786)
ma-sūz-ē ma-w-u xuł
 IND-burn.PRS-3SG:S IND-be.PRS-3SG:S ash
 ‘It (the wood) has burned up (and) turned to ashes.’
- b. Central Kurdish Sanandaj (Mohammadirad 2022b: C, 0430)
bū ba šaw
 become.PST.3SG:S into night
 ‘It turned night.’
- c. Southern Kurdish Bijar (Mohammadirad 2022c: B, 112)
tā d-ū=a nīmarū
 until IND-become.PRS.3SG:S=DRCT noon
 ‘Until it became noon.’

The reversed ordering for adjectival complements is exhibited in (15):

- (15) a. Gorani Gawraju (Mohammadirad 2022a: B, 0220)
āwis ma-w-u bizin-aka
 pregnant IND-be.PRS-3SG:S goat-DEF
 ‘The goat becomes pregnant.’
- b. Central Kurdish Sanandaj (Mohammadirad 2022b: C, 0370)
dang=ī nāzik=aw bû
 voice=3SG:POS soft=COMPL be.PST.3SG:S
 ‘His voice became soft.’
- c. Southern Kurdish Bijar (Mohammadirad 2022c: D, 405)
mas d-û
 drunk IND-be.PRS.3SG:S
 ‘She becomes drunk.’

Table 5 summarizes the linear positioning of complements of ‘become’:

Table 5: Frequencies of post-verbal (Po) complements of ‘become’ in three Kurdic doculects

	G Gawraju			CK Sanandaj			SK Bijar		
	<i>n</i>	<i>n</i> Po	Po	<i>n</i>	<i>n</i> Po	Po	<i>n</i>	<i>n</i> Po	Po
N complement	14	12	86%	22	22	100%	14	13	93%
Adj complement	20	2	10%	12	1	8%	17	3	18%
All complements	34	14	41%	34	23	68%	31	16	51%

As can be seen in Table 5, it is clear that adjectival complements of inchoative ‘become’ show strikingly less tendency than nominal complements to be realised post-predicatively. The reason lies perhaps in the fact that the adjective is treated as the non-verbal complement of ‘become’; hence, the combination Adjective + become acts more like a complex predicate, in which the placement of adjectives is fixed preverbally. In contrast, the nominal complements are framed into a prepositional phrase and are treated like a Goal of verbs of movement.

3.14 Recipient/verb

Recipients of verbs of ‘giving’ are next in line in the likelihood to appear in the post-predicate position. An important observation is that in all three varieties, nominal and/or free pronouns recipients are overwhelmingly post-predicate; see Table 6.

Table 6: Frequencies of post-verbal (Po) recipients in three Kurdish doculects

	G Gawraju			CK Sanandaj			SK Bijar		
	<i>n</i>	<i>n</i> Po	Po	<i>n</i>	<i>n</i> Po	Po	<i>n</i>	<i>n</i> Po	Po
Non-bound recipients	13	13	100%	9	9	100%	9	9	100%
Bound recipients	31	31	100%	26	12	46%	23	0	0%
All recipients	44	44	100%	35	21	60%	32	9	28%

In the investigated dialects, pronominal recipients often occur as clitic pronouns, prosodically dependent on some other item. The dialects differ significantly in the positioning of these bound recipients; see Table 6. They also differ in the syntax of these formatives. In Southern Kurdish Bijar and Gorani Gawraju, bound recipients remain attached to their governing preposition but never occur on the verb. However, in Central Kurdish Sanandaj, bound pronouns have a special syntax of their own in the present tense such that they are realized on the constituent preceding their governing head (see Mohammadirad 2020; Öpengin & Mohammadirad 2022 for the grammar of bound pronouns within Kurdish).

- (16) a. Southern Kurdish Bijar (Mohammadirad 2022c: A, 0069)
mirw-aga xā wa=y da-y
 hen-DEF egg to=3SG:R give.PRS-3SG:A
 ‘The hen gives him egg.’
- b. Central Kurdish Sanandaj (Mohammadirad 2022b: I, 0990)
pot=o pē a-wa-m
 money=2SG:R to IND-give.PRS-1SG:A
 ‘I will give you money.’

The following examples illustrate the post-verbal positioning of bound recipients:

- (17) a. Gorani Gawraju (Mohammadirad 2022a: B, 0233)
šīr-aka=š ma-t-ī=ya wan=šān
 milk-DEF=3SG:POS IND-give.PRS-3SG:A=DRCT to=3PL:R
 ‘She gives them her milk.’

- b. Central Kurdish Sanandaj (Mohammadirad 2022b: B, 0323)

sē dāna hamro=y dā pē=yān

three CLF pear=3SG:A give.PST to=3PL:R

‘He gave them three pears.’

According to Table 6, bound pronouns have different word order preferences than nominals, except in Gorani Gawraju. The crucial point here is that in Gorani Gawraju, the adposition itself occurs after the verb (and therefore the non-mobile clitic with it). In contrast, in Southern Kurdish Bijar, the adposition and the non-mobile clitic appear pre-verbally. Likewise, in Central Kurdish Sanandaj, the adposition remains preverbal, at least quite frequently. The different word order preferences of nominal and bound recipients are indeed worthy of further research, especially that Hawkins’s (2008) typology of “obliques” only accounts for the word order constellation of nominal constituents.

3.15 Addressee/verb

Discussing the word order preferences of Addressees across Northern Kurdish, Haig (2022) makes several important observations: (i) there is a correlation between the flagging of the Addressee argument and its position relative to the verb, such that post-predicate Addressees are not flagged via postpositions and/or circumpositions; (ii) Addressees of verbs which have telic aspectual meanings, i.e. ‘say/tell’ are more expected to occur post-predicatively than Addressees of a verb of speech which indicates non-telic aspectual meaning, e.g. ‘speak,’ the reason being that the former is associated with an endpoint activity whereas the latter is not. Examples of the positionality of Addressee arguments are presented below, see Table 7 for percentages.

- (18) a. Central Kurdish Sanandaj (Mohammadirad 2022b: G, 0660)

mard wit=ī=ya žin-aka=y

PN say.PST=3SG:A=DRCT wife-DEF=3SG:POS

‘Mard said to his wife.’

- b. Gorani Gawraju (Mohammadirad 2022a: A, 0079)

m-wā=ya dāyka=y čīman

IND-say.PRS.3SG:A=DRCT mother=EZ PN

‘She says to the mother of Čīman.’

- c. Southern Kurdish Bijar (Mohammadirad 2022c: A, 0004)

wa pišī-ya iš-ī

to cat-DEF say.PRS-3SG:A

‘She says to the cat.’

Table 7: Frequencies of post-verbal (Po) nominal Addressees of all verbs vs. nominal Addressees of ‘say/tell’

	G Gawraju			CK Sanandaj			SK Bijar		
	<i>n</i>	<i>n</i> Po	Po	<i>n</i>	<i>n</i> Po	Po	<i>n</i>	<i>n</i> Po	Po
Addressees of ‘say/tell’	13	6	46%	13	13	92%	23	0	0%
Addressees (total)	25	10	40%	22	16	72%	52	2	4%

It is clear that Addressees in Central Kurdish Sanandaj and Gorani Gawraju are realised far more frequently rightward after the predicate than Addressees in the Southern Kurdish Bijar. Note, however, that the rate of post-verbal Addressees in the latter remains near zero (only two tokens out of 52 have postverbal ordering). Thus, the preverbal position of Addressees in Southern Kurdish Bijar is independent of the type of verb; it is a structural position.

It is also notable that Addressees of ‘say/tell’ statistically yield even more post-predicate tendency, reflecting that Addressees of ‘say/tell’ are more clearly associated with the notion of endpoint than verbs like ‘speak’ (cf. Haig 2022: 359).

As for the flagging strategy, prepositional flagging remains the primary mode of expressing Addressees across the dialects investigated here. Circumpositions rarely occur, and if they do, the pre-verbal position is the only option, in line with the tendency reported for Northern Kurdish in Haig (2022).

3.16 Place constituents

Place constituents here refer to arguments which denote ‘static location’ in clauses like ‘He works at a factory.’; see Table 8 for the rate of post-predicate place constituents.

- (19) a. Southern Kurdish Bijar (Mohammadirad 2022c: A, 0079)
la sar ay gūl=a mālāw-in
 on top DEM.PROX pond=DEIC bathe.PRS-3PL:S
 ‘They bathe at this pond.’
- b. Central Kurdish Sanandaj (Mohammadirad 2022b: A, 0012)
šaw la kēf řaš=ā na-xaf-in
 night in mountain black=POST PROH-sleep.PRS-2PL:S
 ‘Do not sleep the night in the black mountain!’

Table 8: Frequencies of post-verbal (Po) nominal Addressees of all verbs vs. nominal Addressees of ‘say/tell’

	G Gawraju			CK Sanandaj			SK Bijar		
	<i>n</i>	<i>n</i> Po	Po	<i>n</i>	<i>n</i> Po	Po	<i>n</i>	<i>n</i> Po	Po
Place arguments	60	25	42%	115	20	17%	65	10	15%

- c. Gorani Gawraju (Mohammadirad 2022a: B, 0352)

ča=tān waš ka(rd) a(ž) ka=y lālo
 what=2PL:A good do.PST in house=EZ uncle
 ‘What did you prepare in your uncle’s house?’

Comparing the post-predicate realisation of place constituents to Goals (see 3.12) reveals that Goals differ significantly from Place constituents in post-verbal occurrence. Nevertheless, Place constituents are more post-posed than, say, direct objects, suggesting that the notion of ‘location,’ whether endpoint or not, triggers extraposition in the Kurdic varieties of the Zagros region.

3.17 Place constituents of a copular verb

Locational copula constructions are clauses in which the place constituent is a complement of the copular verb, e.g. ‘I am at home.’ In Central Kurdish Sanandaj and Gorani Gawraju, the predicate is an existential copula in such constructions, which requires the place complement to appear post-verbally. This existential construction is limited to the present tense, though; in the past tense, the past base of the verb ‘to be’ is used as the predicate, and its complement is generally realised preverbally. Southern Kurdish Bijar, on the other hand, consistently puts the place constituent before the copula verb; see Table 9 for percentages.⁷

- (20) a. Gorani Gawraju (Mohammadirad 2022a: G, 1306)

zangoł=a ziřa hā pišt=e kanü
 bell=EZ swinging EXIST.3SG:S back=EZ flour_bin
 ‘The swinging bell is in the back of bin of flour.’

⁷The high percentage of post-verbal place constituents of present copula verbs might be an indication of Aramaic influence in the core Gorani speech zone (Don Stilo, p.c.). However, it is noticeable that in NENA Sanandaj, locative complements of copula verbs are by default realised pre-verbally (see Khan 2009).

Table 9: Frequencies of post-verbal (Po) place arguments of present tense copula constructions in three Kurdish doculects

	G Gawraju			CK Sanandaj			SK Bijar		
	<i>n</i>	<i>n</i> Po	Po	<i>n</i>	<i>n</i> Po	Po	<i>n</i>	<i>n</i> Po	Po
Place arguments	6	4	66%	7	7	100%	11	0	0%

- b. Central Kurdish Sanandaj (Mohammadirad 2022b: K, 1071)

hā la māṭ-ē tārīk=ā
 EXIST.3SG:S in house-INDF dark=POST
 ‘(He) is in a dark house.’

- c. Southern Kurdish Bijar (Mohammadirad 2022c: D, 0397)

kēnī la pāl daryā d-ū
 spring in side sea IND-be.PRS.3SG:S
 ‘The spring is next to the sea.’

While the number of tokens is low and no categorial conclusions can be made, it is clear that the Kurdish varieties in the Gorani zone of influence have a clear tendency for post-verbal positioning of place arguments of copular verbs. In contrast, Southern Kurdish Bijar opts for an opposing tendency, namely preverbal placement.

3.18 Light verb complements

In the Kurdish dialects investigated here, light verb complements of certain types of complex predicates appear after the light verb, e.g., Central Kurdish Sanandaj *kaft=a řē* [fall.PST.3SG:S=DRCT road] ‘He set out.’ In such predicates, the light verb is obligatorily followed by the directional clitic. A variety of light verbs can be used in such constructions, e.g., ‘do,’ ‘fall,’ ‘come,’ ‘sit,’ ‘grab,’ etc. It is notable that several of these light verbs involve motion verbs, e.g. ‘fall,’ ‘come,’ and the complement can be considered a metaphorical Goal. The light verbs used here can sometimes have an ‘inceptive’ sense.

- (21) a. Central Kurdish Sanandaj (Mohammadirad 2022b: D, 484)

a-kaf-ēt=a xwašī=yā
 IND-fall.PRS-3SG:S=DRCT happiness=POST
 ‘He will get rich. (Lit. He will fall into happiness)’

- b. Gorani Gawraju (Mohammadirad 2022a: A, 0061)
hānī-aka m-ā=ya qisa
 spring-DEF IND-come.PRS.3SG:S=DRCT speech
 ‘The water spring starts to speak.’
- c. Southern Kurdish Bijar (Mohammadirad 2022c: E, 677)
dālik=ī girt=ay=a bāwiš=aw
 mother=3SG:POS grab.PST.3SG:A=3SG:O=DRCT hug=POST
 ‘Her mother hugged her.’

In a similar manner, in the Bahdini variety of Northern Kurdish, some light verb complements occur after the light verb, followed by the directional particle. The difference is that the postverbal placement of the complement seems to be the case only with the light verb *kirin* ‘do’ (cf. Haig 2022: 344).

This might suggest that we are dealing with a common Kurdish syntax. However, it is notable that within Central Kurdish, the post-verbal placement of light-verb complement is fading out towards the northern dialects. The following examples show different treatment of the prepositional light verb complements in the southern dialect of Sanandaj vs., the northern dialects of Central Kurdish.

- (22) a. Central Kurdish Sanandaj
hāt=a jiwāw
 come.PST.3SG:S=DRCT answer
 ‘He started to speak.’
- b. Central Kurdish Shaqlawa (Khan et al. 2022: 194)
ba jiwāb hāt
 to answer come.PST.3SG:S
 ‘He started to speak.’
- (23) a. Central Kurdish Sanandaj (Mohammadirad 2022b: F, 0644)
kaft=a zawī
 fall.PST:S=DRCT ground
 ‘[The hat] fell on the ground.’
- b. Central Kurdish Mukri (Öpengin 2016: 251)
be ferz-ī dā kewt
 to ground-OBL POST fall.PST.3SG:S
 ‘[The tree trunk] fell down on the ground.’

Assuming that the directional clitic in Central Kurdish Sanandaj is the reduced form of preposition *ba/we*, then the differences between Central Kurdish Sanan-

daj and Northern Central Kurdish varieties boils down to pre-verbal vs. post-verbal treatment of a light-verb complement, which appears in the form of a prepositional phrase. While a full investigation of this division within Central Kurdish awaits future research, it can be seen that Central Kurdish dialects opt for the reversed linear positioning of the light-verb complement. It is interesting to note that in parallel constructions, postverbal positioning is also the case in Hawrami Takht, geographically neighbouring Central Kurdish Sanandaj.

- (24) a. Takht Hawrami (Mohammadirad In review: HB.31)

āmā=we zuwāb
come.PST.3SG:S=COMPL answer
'He started to speak.'

- b. Takht Hawrami (Mohammadirad In review: ŽM.27)

āsē=nē=m jīyā
leave.PST.PTCP.PL=COP.3PL:O=1SG:A place
'I left them behind.'

The post-predicate placement of light-verb complements in Central Kurdish Sanandaj is quite unusual within the larger context of Central Kurdish. It seems reasonable to suggest that this is a further aspect of Central Kurdish Sanandaj word order, which can be related to an assumed Gorani substrate within Central Kurdish Sanandaj, as argued in Mohammadirad (2024).

3.19 Other obliques

In addition to the constituents mentioned in the previous sections, a variety of other oblique arguments, here collectively referred to as “other obliques”, can be realised post-predicatively. These include instruments, comitatives, beneficiaries, and sources (see Table 10 for figures). By way of example, the placement of beneficiaries is illustrated.

- (25) a. Central Kurdish Sanandaj (Mohammadirad 2022b: C, 0355)

nān Ø-san-ē bo mināt-akān=ī
bread SBJV-buy.PRS-3SG:A for child-DEF.PL=3SG:POS
'That she buy bread for her children.'

- b. Gorani Gawraju (Mohammadirad 2022a: D, 0592)

ī kūw=a a(řā) tu bi-tāš-ū
DEM mountain=DEIC for 2SG SBJV-hammer.PRS-1SG:A
'I may hammer this mountain for you.'

- c. Southern Kurdish Bijar (Mohammadirad 2022c: A, 0072)

pīnačī=ya kawš arā=y dūrn-ī

cobbler=DEF shoes for=3SG:R sew.PRS-3SG:A

‘The cobbler sews the shoes for him.’

Table 10: Frequencies of post-verbal (Po) instruments, comitatives, sources, and beneficiaries in three Kurdish doculects

	G Gawraju			CK Sanandaj			SK Bijar		
	<i>n</i>	<i>n</i> Po	Po	<i>n</i>	<i>n</i> Po	Po	<i>n</i>	<i>n</i> Po	Po
Obliques	196	76	39%	279	86	31%	238	76	32%

It can be seen from Table 10 that instruments, comitatives, sources, and beneficiaries tend less to be placed rightward to the verb than, say, recipients. The reason could be that, unlike Goals and Recipients, these oblique arguments are not directly involved with endpoint semantics, meaning that they cannot readily be interpreted as endpoint arguments in the transfer of action.

3.20 Summary of post-verbal placement of constituents

In the previous subsections, the placement of different constituents relative to the verb was investigated across three Kurdish varieties confined within Zagros mountains. It was seen that these historical OV languages exhibit remarkable drift towards head-initial syntax, contrary to the predictions of head directionality hypothesis (see Dryer 1992). The head-initial configurations are shown in Table 11.

Table 11: Head-initial configurations

Noun	Adjective
Possessed	Possessor
Matrix clause	Complement clause
Auxiliary	Main verb
Complementizer	Complement clause
Verb	Goal
Verb	Recipient

Among all arguments, direct objects and copula complements (except for a subset of place constituents in copula constructions) are the most stable in their preverbal placement. Other constituents exhibit various degrees of rightward drift, as illustrated in Figure 2.⁸

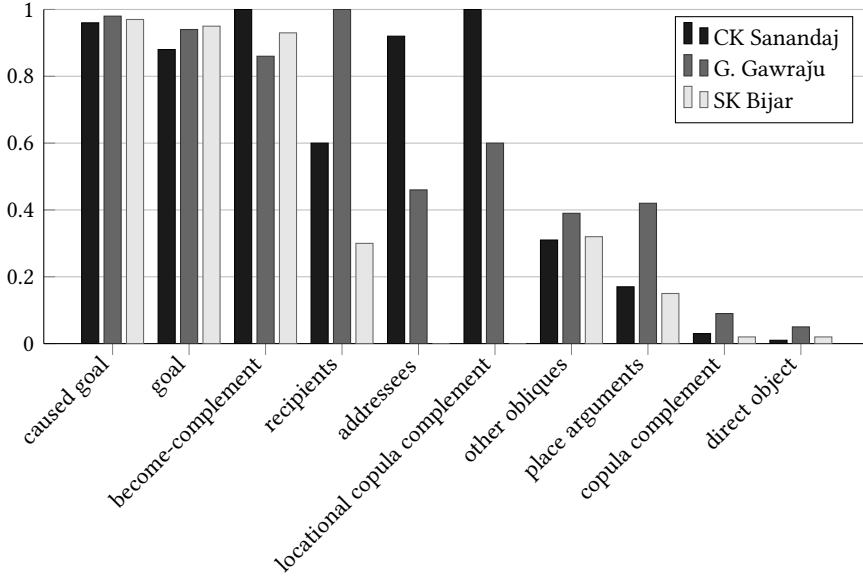


Figure 2: Post-predicate placement of different constituents across Kur-dic dialects

As can be seen from Figure 2, the three dialects share the commonality of having the highest rate of post-predicate placement for caused goals and goals of verbs of movements. Similarly, they exhibit nearly the same rate of post-predicate placement for nominal complements of ‘become,’ which could be an indication of common Kurdish syntax (see Haig 2022: 342–343 for Northern Kurdish data).⁹ Likewise, “other obliques” exhibit similar ratios of post-predicativity across these dialects. Overall, the high rate of post-predicate obliques, both end-point constituents and non-endpoint ones, suggests these varieties of Kurdish are candidates for Hawkins’s (2008) OVX type.

It is notable that in two word order configurations, namely V-Addressees and V-locational copula arguments, Gorani Gawraju and Central Kurdish Sanandaj

⁸Note that the percentages given for Addressees are based on the placement of the nominal/non-bound form of these constituents. Relatedly, the ratios for locational copula complement only contain the position of such constituents in present tense copula constructions (see §3.17 for the explanations).

⁹Though see §3.13 for the distinction between adjectival vs. nominal complements of inchoative ‘become.’

Table 12: Post predicate nominal phrases and their flagging type

	n. Po	prep	bare n + direct clitic on the verb	pre-nominal relational nouns ^a	bare	other (postp, case, circ)
CK Sanandaj	485	36%	21%	14%	10%	19%
G Gawraju	453	21%	25%	20%	21%	13%
SK Bijar	410	22%	10%	25%	28%	15%

^aThe verb may take a directional clitic when a pre-nominal relational noun flags the following noun.

prefer post-predicate realisation, whereas Southern Kurdish Bijar opts for pre-verbal ordering. In the next section, it is seen that these opposing tendencies are motivated by the geographical distribution of Kurdish dialects.

Another parameter of interest is how post-predicate nominals are flagged. Here, we should be cautious of a hasty conclusion since in all doculects some post-predicate nominals are preceded by a directional particle on the verbs, which is reconstructible as a preposition even in the same doculect. Thus, in Table 12, nominals which are preceded by a directional particle on the verb are analysed in a different column. Combining the figures for directional particles and prepositional flagging, we obtain 46% and 57% prepositional flagging of post-predicate elements in Gorani Gawraju and Central Kurdish Sanandaj, respectively. In contrast, the proportion is only 32% for the Southern Kurdish Bijar. This suggests that the Kurdish doculects in the immediate Gorani zone of influence, i.e., Central Kurdish Sanandaj, exhibit higher rates of prepositional flagging than those further from the realm of Gorani influence. Alternatively, the difference in post-verbal flagging seems to be largely motivated by the higher number of bare NPs in Southern Kurdish-Bijar. Presumably, they result from an original *V=DRCT NP, which becomes V NP through the loss of the directional clitic on the verb. Note that pairwise testing of the differences between the three dialects using a Fisher's Exact Test shows that the differences are all significant at $p < 0.05$.

It is also conceivable to consider pre-nominal relational nouns as emerging prepositions. Combining the figures for directional particles, prepositional flagging, and pre-nominal relational nouns, yields a similar picture. We obtain 71% and 66% prepositional flagging for Central Kurdish Sanandaj and Gorani Gawraju, respectively, whereas the proportion for Southern Kurdish Bijar is 57%.

Nonetheless, the overall picture suggests that not one special type of flagging is favoured post-predicatively. It is only in Central Kurdish Sanandaj that prepositional flagging is relatively high in the postverbal slot. This suggests that the syntax is approaching the head-initial type, with both verbs and adpositions preceding their complements.

Another parameter of interest is the overall levels of prepositionality in these Kurdish dialects, regardless of the placement of flagged nominals. The procedure for quantifying this was as follows: Taking the three Kurdish WOWA datasets, I selected the total number of tokens in the following functions: ABL(ative); ADDR(essee); BEN(efactive); COM(itative); GOAL; GOAL-C(aused); INSTR(umental); LOC(ative); REC(ipient); REC-BEN (see [Nourzaei & Haig 2024 \[this volume\]](#)). I then extracted those that were flagged with prepositions or pre-nominal relational nouns or by a directional particle on the verb (lumped together as “prepositional”) and those that were flagged with postpositions, or circumpositions (lumped together as “postpositional”).

Table 13: Overall levels of prepositionality

	n. clauses	prepositional	postpositional
CK Sanandaj	620	61%	34%
G Gawraju	475	78%	3%
SK Bijar	602	85%	10%

It can be seen from Table 13 that Gorani Gawraju and Southern Kurdish Bijar have much higher rates of prepositionality than Central Kurdish Sanandaj. Conversely, the levels of postpositionality are much higher in Central Kurdish Sanandaj compared with the other two doculects. These figures show that, barring Central Kurdish Sanandaj, mixed adpositional typology cannot be considered a feature of Southern Kurdish Bijar and especially Gorani Gawraju, at least in terms of token frequency in discourse. In other words, these two dialects have significantly approached the head-initial syntax with regard to adpositional typology. One way of interpreting these contradicting figures is to consider Persian influence on doculects with the lowest levels of postpositionality, considering that Modern Persian also lacks postpositions (except for the direct object marking *-rā*, which is irrelevant to our discussion). Persian influence seems to have been direct in the case of Southern Kurdish Bijar and probably indirect through Southern Kurdish in Gorani Gawraju. Alternatively, it may also reflect the earlier influence of Aramaic, which was previously much more widely spoken in the region.

4 Areal/contact issues

According to Figure 3, much of the post-predicate syntax is similar in the investigated dialects. Thus, each of Goals, Caused Goals, Recipients, Complements of ‘become,’ ‘other Obliques’ (instruments, sources, and comitatives), Complements of copular verbs, and Direct objects occur with more or less the same proportion in the post-predicate position. Near-categorical post-verbal placement of goals and recipients is common to all three varieties investigated here, and appears to be a feature shared by all varieties of Kurdish, Gorani and Zazaki.

The major area of differentiation is the position of Addressees, and locational complements of copula verbs. These two traits bring together Central Kurdish Sanandaj and Gorani Gawraju against the Southern Kurdish Bijar, which is situated further to the north. Given that much of the post-predicate syntax of these varieties is shared, the question is why Southern Kurdish Bijar prefers pre-predicate positioning of Addressees and locational copula complements. Some scenarios can be outlined here:

First, as discussed in the introduction, recent research on the Central Kurdish dialect of the Sanandaj region has uncovered evidence for a significant Gorani substrate, which is attributed to an earlier shift from Gorani to Kurdish, or at least a high level of Kurdish-Gorani bilingualism among Kurds (see [Mohammadirad 2024](#) for a recent discussion). Historically, the Sanandaj area used to be part of an earlier and more extensive Gorani heartland. Language shift from Gorani to Kurdish in the region is documented, for instance, in the introduction to the book *Les dialectes d’Awroman et de Pawa*, which reports on the the linguistic situation at Sanandaj in 1900. The authors note that “learned people” in the city knew and spoke Maço (the epithet for Gorani/Hawrami/Awromānī, meaning ‘S/he says’):

À Sänä où le kurde est maintenant la langue commune hors des communautés persane, juive et syrienne, on prétendait que l’awromānī y avait été communément entendu autrefois [In Sänä (Sanandaj, Kurd. Sine), where Kurdish is now the common language outside the Persian, Jewish and Syriac communities, it was claimed that Awromānī had been commonly heard there in the past] ([Christensen & Benedictsens 1921](#): 5)¹⁰

Assuming the shift scenario to be true, V-Addressee and copula-location orders in Central Kurdish Sanandaj can be instances of constructional calque (or

¹⁰See [Khan & Mohammadirad \(2024\)](#) for a detailed account of language shift in Sanandaj. Likewise, ([Mahmoudveysi 2016](#): 3) reports that the vernaculars of speakers of Bēwānījī, Rijābī, and Gāhwārāī localities around Kerend (Iran), which were investigated by [Mann & Hadank \(1930\)](#) as Gorani dialects, have now shifted to vernaculars of Southern Kurdish.

“metatypy” in terms of Ross 2019), meaning that the post-verbal placement of the mentioned constructions was calqued into the type of Kurdish in Sanandaj region to which Gorani speakers shifted. Additional support for a Gorani substrate in the word order domain comes from the opposing directionality of light-verb complements in Central Kurdish dialects, resulting in post-predicate linearisation of light-verb complement in Southern dialects (see §3.18). Note that in the case of Addressees and locational copula complements, Central Kurdish Sanandaj has extended post-verbal placement to a greater degree than Gorani Gawraju. The reason could perhaps lie in the fact that Gorani Gawraju probably does not faithfully represent the actual substrate variety of Gorani that must have been spoken in Sanandaj. It is geographically far from Sanandaj, quite isolated from other varieties of Gorani, and it has itself been Kurdicised to a large extent. Gorani dialects, geographically closer to Central Kurdish Sanandaj, would probably yield more interesting correlations; we consider this option below.

This brings us to the second scenario, which concerns the geographical distribution of features. If we assume that the Central Kurdish Sanandaj values on the features of V-Addressee and copula-place are indeed due to a Gorani substrate, we would expect to find similar values in a conservative variety of Gorani, particularly if geographically close to Central Kurdish Sanandaj. Similarly, if Southern Kurdish Bijar is more generally representative of Kurdish spoken further from the core of the earlier Gorani speech zone, we would expect the Bijar values to be closer to Kurdish varieties spoken further to the north. In order to test these predictions, Hawrami Takht, geographically close to Central Kurdish Sanandaj, and Central Kurdish Mukri (and Central Kurdish Bingird), geographically close to Southern Kurdish Bijar, were selected as control languages (see Figure 1).

To start with the Addressees, I tested the post-predicate realisation of Addressees of ‘say/tell,’ including nominal Addressees only, in the following varieties: Hawrami Takht (20 clauses, Mohammadirad *In review*), Central Kurdish Bingird (14 clauses, MacKenzie 1962: 136–170), and Central Kurdish Mukri (12 clauses, Öpengin 2016). Figure 3 exhibits the ratio of post-predicate nominal Addressees in the sample.

The resulting data confirms our hypothesis that the postverbal realisation of nominal Addressees is areally confined to the south of the Central Kurdish speech zone, where we assume a Gorani substrate. Interestingly, in the NENA dialect of Sanandaj, Addressee arguments of ‘say/tell’ are 100% post-predicate (see Noorlander 2022), suggesting further that the word order profile of Addressees is areally defined. An areally-mediated shift in Addressee placement is also documented for Northern Kurdish in Haig (2022). In the northern Central Kurdish

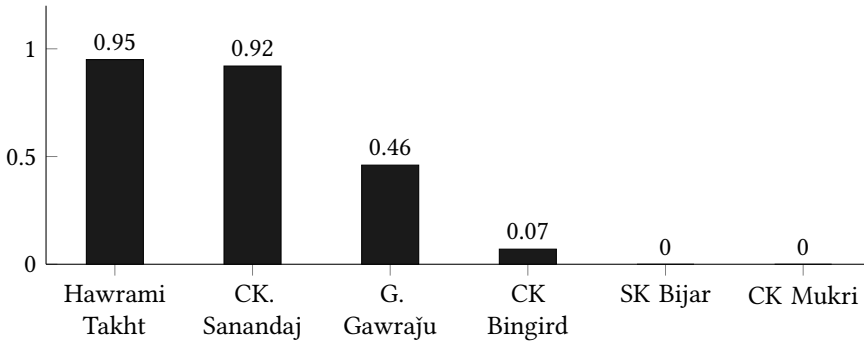


Figure 3: Post-predicate ratio of nominal Addressees

dialects of Mukri and Bingird, the reverse order Addressee-Verb is prevalent, tying in with the ordering in the geographically neighbouring Southern Kurdish Bijar.

It is also notable that Central Kurdish Sanandaj shows much closer correspondence with the neighbouring Hawrami Takht than with the Kurdicised Gorani Gawraju. The latter is not really a good representative of the original assumed state of, e.g. Gorani as once spoken in Sanandaj, and it is outside of the Central Kurdish region. Indeed, Central Kurdish Sanandaj better reflects the original Gorani word order than Gorani Gawraju. The real conclusion seems to be the structural proximity of Central Kurdish Sanandaj and Hawrami Takht, in line with the assumption of a Gorani substrate in Central Kurdish Sanandaj.

Relatedly, the opposing directionality in the placement of place arguments of copula constructions in Central Kurdish Sanandaj and Southern Kurdish Bijar is matched by the same tendencies in immediate neighbouring languages,¹¹ thus in the southern Central Kurdish speech zone place arguments of copula verbs are predominantly post-predicate, whereas the reverse ordering holds in the north, see Figure 4.

An investigation of these minor word order features thus reveals commonalities between southern Central Kurdish dialects, here represented by Central Kurdish Sanandaj and Gorani (represented by Hawrami Takht). I propose that these differences can be most plausibly explained through the greater influence of Gorani in the southern part of the Central Kurdish speech zone, particularly due to Gorani speakers shifting to Kurdish. Northern Central Kurdish dialects, like Central Kurdish Mukri, in which contact with Gorani was probably not as

¹¹The number of test clauses is 12 for Central Kurdish Mukri, and 10 for Hawrami Takht.

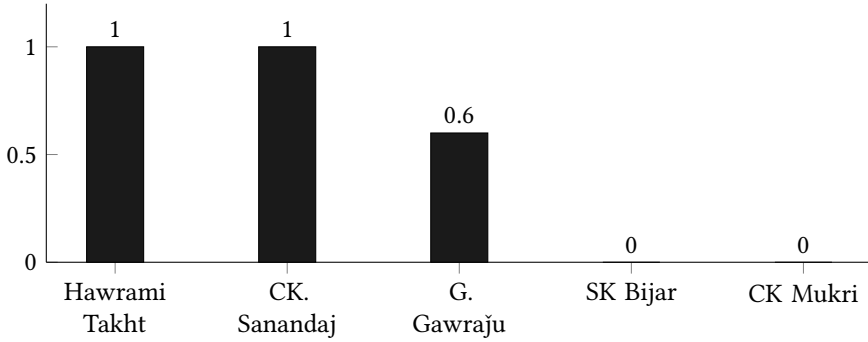


Figure 4: Post-predicate ratio of place constituents in copular constructions

intense as it was in the south, lack the effects documented here (see [Mohammadirad 2024](#) for other features which highlight the impact of Gorani substrate in creating north/south division of Central Kurdish dialects). The findings also suggest, conversely, that the remnant Gorani variety of Gawraju has diverged from a presumably more conservative state of Hawrami Takht and drawn closer to the more widespread pattern found in Kurdish.

Note that the minor word order patterns considered in this section have generally gone under the radar of the larger-scale approaches to Kurdish word order and language contact but illustrate the importance of more detailed case studies in identifying local patterns of contact.

5 Conclusion

Among Iranian languages, Kurdish varieties are the westernmost outlier at the intersection with VO languages. This has resulted in the preponderance of head-initial word order configurations in this group of varieties, as documented in [Haig \(2015\)](#) and subsequent literature. This study highlighted the word order profile of oblique arguments in three Kurdish dialects, namely Central Kurdish Sanandaj, Gorani Gawraju, and Southern Kurdish Bijar. Major patterns of constituent ordering in these languages match to a large extent; for example, they all have rigid object-word order: Goals and nominal Recipients are predominantly postverbal. However, these dialects exhibit microvariation concerning the positioning of Addressees and light-verb complements, and locational copula complements. These differences were claimed to represent areal patterns and warrant a north-south distinction of Central Kurdish dialects triggered by the Gorani sub-

strate in the southern Central Kurdish dialects. It appears that the northern Central Kurdish dialects have preserved the generally assumed Old Iranian pattern of preverbal realisation of Addressees, reinforced through contact with Azeri Turkic varieties. In contrast, the southernmost dialects have shifted to post-verbal Addressees and post-verbal place complements in copula constructions.

Abbreviations

1	1st person	NEG	negative
2	2nd person	NUM	numeral
3	3rd person	N	Noun
A	transitive subject	OBL	oblique
ADJ	adjective	O	Direct Object
AUX	auxiliary	PERF	perfect
CK	Central Kurdish	PL	plural
CLF	classifier	PN	Proper Noun
COMP	complementizer	POS	possessor
COMPL	completive	POST	postposition
COP	copula	PROH	prohibitive
DEF	definite	PROX	proximal
DEIC	deictic	PRS	present
DEM	demonstrative	PST	past
DIST	distal	PTCL	particle
DRCT	directional particle	PTCP	participle
EXIST	existential particle	R	Flagged oblique argument
EZ	ezafe	S	Intransitive Subject
G	Gorani	SBJV	subjunctive
IND	indicative	SG	singular
INDF	indefinite	SK	Southern Kurdish
IPFV	imperfective	SPEC	specific

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References

- Asadpour, Hiwa. 2022a. *Typologizing word order variation in northwestern Iran*. Frankfurt am Main: Goethe-Universität. (Doctoral dissertation).
- Asadpour, Hiwa. 2022b. Word order in Mukri Kurdish - The case of incorporated targets. In Hiwa Asadpour & Thomas Jügel (eds.), *Word order variation: Semitic, Turkic and Indo-European languages in contact*, 63–87. Berlin: De Gruyter Mouton.
- Bailey, Denise. 2018. *A grammar of Gawraju Gurani*. Georg-August-Universität Göttingen. (Doctoral dissertation).
- Christensen, Arthur & Åge Meyer Benedictsén. 1921. *Les dialectes d'Awroman et de Pawa*. French. Kobenhavn: B. Lunos.
- De Morgan, Jacques. 1904. *Mission scientifique en perse. études linguistiques. dialectes kurdes, tome 5*. Paris: E. Leroux.
- Dryer, Matthew S. 1992. The Greenbergian word order correlations. *Language* 68. 81–138.
- Fattah, Ismaïl Kamandâr. 2000. *Les dialectes kurdes méridionaux: étude linguistique et dialectologique (Iranica 37)*. Leuven: Peeters.
- Haig, Geoffrey. 2015. Verb-goal (VG) word order in Kurdish and Neo-Aramaic: Typological and areal considerations. In Geoffrey Khan & Lidia Napiorkowska (eds.), *Neo-Aramaic and its linguistic context*, 407–425. Piscataway, NJ: Gorgias Press.
- Haig, Geoffrey. 2017. *Post-predicate arguments in Iranian languages. Keynote lecture, seventh international conference on Iranian languages (ICIL7), Lomonosov Moscow State University, 28-30th August 2017*.
- Haig, Geoffrey. 2022. Post-predicate constituents in Kurdish. In Yaron Matras, Geoffrey Haig & Ergin Öpengin (eds.), *Structural and typological variation in the dialects of Kurdish*, 335–377. Cham: Springer International Publishing. DOI: [10.1007/978-3-030-78837-7_8](https://doi.org/10.1007/978-3-030-78837-7_8).
- Haig, Geoffrey, Paul M. Noorlander & Nils N. Schiborr. In press. Which word order features are stable in a contact setting? Corpus-based evidence from the Western Asian transition zone. In Jeroen Darquennes, Joe Salmons & Wim Vandebussche (eds.), *Language contact: An international handbook*, vol. 2. Berlin: De Gruyter Mouton.
- Haig, Rasekh-Mahend, Stilo, Schreiber & Schiborr. 2024. Post-predicate elements in the Western Asian Transition Zone: Data, theory, and methods. In Geoffrey Haig, Mohammad Rasekh-Mahand, Donald Stilo, Laurentia Schreiber & Nils N. Schiborr (eds.), *Post-predicate elements in the Western Asian Transition Zone: A*

- corpus-based approach to areal typology*, 3–54. Berlin: Language Science Press. DOI: ??.
- Hawkins, John A. 2008. An asymmetry between VO and OV languages: The ordering of obliques. In Greville Corbett & Michael Noonan (eds.), *Case and grammatical relations: Studies in honor of Bernard Comrie*, 167–190. Amsterdam: Benjamins. DOI: doi.org/10.1075/tsl.81.08ana.
- Khan, Geoffrey. 2009. *The Jewish Neo-Aramaic dialect of Sanandaj*. Piscataway, NJ: Gorgias Press.
- Khan, Geoffrey & Masoud Mohammadirad. 2024. *A study of the impact of iranian on neo-aramaic*. Berlin, Boston: De Gruyter Mouton. DOI: [doi:10.1515/9783111209180](https://doi.org/10.1515/9783111209180).
- Khan, Geoffrey, Masoud Mohammadirad, Dorota Molin & Paul M. Noorlander. 2022. *Neo-Aramaic and Kurdish folklore from Northern Iraq*. Cambridge: Open Book Publishers. DOI: [10.11647/OBP.0307](https://doi.org/10.11647/OBP.0307).
- MacKenzie, David N. 1962. *Kurdish dialect studies Vol. II*. London/New York: Oxford University Press.
- Mahmoudveysi, Parvin. 2016. *The meter and the literary language of Gūrānī poetry*. Hamburg: Universität Hamburg. (Doctoral dissertation).
- Mahmoudveysi, Parvin & Denise Bailey. 2013. *The Gorani language of Zarda, a village of west Iran: Texts, grammar, and lexicon*. Wiesbaden: Reichert.
- Mahmoudveysi, Parvin, Denise Bailey, Ludwig Paul & Geoffrey Haig. 2012. *The Gorani language of Gawraǰū, a village of West Iran: Texts, grammar, and lexicon*. Wiesbaden: Reichert.
- Mann, Oskar & Karl Hadank. 1930. *Mundarten der Gūrān, besonders das Kändülāi, Auramānī und Bâdschälānī, bearbeitet von Karl Hadank*. Berlin: Verlag der Preussischen Akademie der Wissenschaften in Kommission bei Walter De Gruyter & Co.
- McCarus, Ernest. 2009. Kurdish. In Gernot Windfuhr (ed.), *The Iranian Languages*, 587–633. London & New York: Routledge.
- Mohammadirad, Masoud. 2020. *Pronominal clitics in Western Iranian languages: Description, mapping, and typological implications*. Paris: Université Sorbonne Nouvelle Paris 3. (Doctoral dissertation). <https://tel.archives-ouvertes.fr/tel-02988008/document>.
- Mohammadirad, Masoud. 2022a. Gorani (Gawraǰū). In Geoffrey Haig, Donald Stilo, Mahîr C. Doğan & Nils N. Schiborr (eds.), *WOWA — Word Order in Western Asia: A spoken-language-based corpus for investigating areal effects in word order variation*. Bamberg: Bamberg University Press. multicast.aspra.uni-bamberg.de/resources/wowa/.

- Mohammadirad, Masoud. 2022b. Kurdish (Central, Sanandaj). In Geoffrey Haig, Donald Stilo, Mahîr C. Doğan & Nils N. Schiborr (eds.), *WOWA – Word Order in Western Asia: A spoken-language-based corpus for investigating areal effects in word order variation*. Bamberg: University of Bamberg. multicast.aspra.uni-bamberg.de/resources/wowa/.
- Mohammadirad, Masoud. 2022c. Kurdish (Southern, Bijar). In Geoffrey Haig, Donald Stilo, Mahîr C. Doğan & Nils N. Schiborr (eds.), *WOWA – Word Order in Western Asia: A spoken-language-based corpus for investigating areal effects in word order variation*. Bamberg: Bamberg University Press. multicast.aspra.uni-bamberg.de/resources/wowa/.
- Mohammadirad, Masoud. 2024. Gorani substrate within Kurdish: Evidence from southern dialects of Central Kurdish. *Journal of Historical Linguistics*. DOI: [10.1075/jhl.23001.moh](https://doi.org/10.1075/jhl.23001.moh).
- Mohammadirad, Masoud. In review. A grammar of Hewramî.
- Mohammadirad, Masoud. In press. Bound argument ordering across Central Kurdish and the Gorani substrate. In Jaffer Sheyholislami, Geoffrey Haig, Haidar Khezri, Salih Akin & Ergin Öpengin (eds.), *Oxford handbook of Kurdish linguistics*. Oxford: Oxford University Press.
- Noorlander, Paul M. 2022. NE Neo-Aramaic (Jewish Sanandaj). In Geoffrey Haig, Donald Stilo, Mahîr C. Doğan & Nils N. Schiborr (eds.), *WOWA – Word Order in Western Asia: A spoken-language-based corpus for investigating areal effects in word order variation*. Bamberg: University of Bamberg. multicast.aspra.uni-bamberg.de/resources/wowa/.
- Nourzaei, Maryam & Geoffrey Haig. 2024. Balochi: A cross-dialect investigation of post-verbal elements. In Geoffrey Haig, Mohammad Rasekh-Mahand, Donald Stilo, Laurentia Schreiber & Nils N. Schiborr (eds.), *Post-predicate elements in the Western Asian Transition Zone: A corpus-based approach to areal typology*, 121–154. Berlin: Language Science Press. DOI: ??.
- Öpengin, Ergin. 2016. *The Mukri variety of Central Kurdish: Grammar, texts, and lexicon*. Wiesbaden: Reichert.
- Öpengin, Ergin & Masoud Mohammadirad. 2022. Pronominal clitics across Kurdish: Areal distribution, structural variation, and diachrony. In Yaron Matras, Geoffrey Haig & Ergin Öpengin (eds.), *Structural and typological variation in the dialects of Kurdish*, 181–237. Cham: Springer International Publishing. DOI: [10.1007/978-3-030-78837-7_5](https://doi.org/10.1007/978-3-030-78837-7_5).
- Parizadeh, Mehdi & Mohammad Rasekh-Mahand. 2024. Post-predicate elements in Early New Persian (10–13th Century CE). In Geoffrey Haig, Mohammad Rasekh-Mahand, Donald Stilo, Laurentia Schreiber & Nils N. Schiborr (eds.),

- Post-predicate elements in the Western Asian Transition Zone: A corpus-based approach to areal typology*, 231–244. Berlin: Language Science Press. DOI: ??.
- Querry, Amédée. 1896. Le dialecte Guerruci. *Mémoires de la Société de Linguistique de Paris* 9. 1–23.
- Rasekh-Mahand, Mohammad, Elham Izadi, Mehdi Parizadeh, Geoffrey Haig & Nils Schiborr. 2024. Post-predicate elements in modern colloquial Persian: A multifactorial analysis. In Geoffrey Haig, Mohammad Rasekh-Mahand, Donald Stilo, Laurentia Schreiber & Nils N. Schiborr (eds.), *Post-predicate elements in the Western Asian Transition Zone: A corpus-based approach to areal typology*, 197–230. Berlin: Language Science Press. DOI: ??.
- Ross, Malcolm. 2019. Syntax and contact-induced language change. In Anthony P. Grant (ed.), *The Oxford handbook of language contact*, 123–154. Oxford: Oxford University Press. DOI: [10.1093/oxfordhb/9780199945092.013.5](https://doi.org/10.1093/oxfordhb/9780199945092.013.5).
- Stilo, Donald. 2009. Circumpositions as an areal response: The case study of the Iranian zone. *Turkic Languages* 13. 3–33.