Gorani substrate within Kurdish

Evidence from southern dialects of Central Kurdish

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The traditional view within Kurdish linguistics is that the split between Central Kurdish (CK) and Northern Kurdish (NK) is mainly the result of a Gorani substrate within the former group. More recent studies refute this hypothesis, arguing instead that Kurdish was initially composed of two distinct but closely related subgroups and that the differences between CK and NK are partly due to distinct source languages and partly due to ensuing contact with neighbouring languages. This study aims to shed new light on the Gorani-substrate hypothesis within CK by examining a corpus-based study of the southernmost CK dialects located within the historical Gorani heartland. Combining recent historical accounts of language shift from Gorani to CK in the region with linguistic data, the paper claims that (i) Gorani borrowings and substrate features reflect different layers of historical contact in Southern CK dialects and (ii) the Gorani substrate has caused a split in the morphosyntactic features across vernaculars of CK, showcasing second-language learning in shaping the historically recent development of Southern CK dialects.

Keywords: language shift, imposition, borrowing, agentivity, second-language acquisition, metatypy

1. Introduction

Kurdish refers to a group of West Iranian languages spoken at the intersection of western Iran, northern Iraq, north-eastern Syria, and south-eastern Turkey. Varieties of Kurdish dialects are generally divided into three major subgroups: Northern Kurdish (NK), Central Kurdish (CK), and Southern Kurdish (SK). NK, otherwise called Kurmanji, is the largest group in terms of the number of speakers and geographical span. CK, also called Sorani, has long been promoted as a stan-

dard language in the semi-autonomous Kurdish region of Iraq. SK dialects, on the other hand, have long been stigmatised and have only recently received attention within academic circles (cf. Fattah 2000; Belelli 2019; Mohammadirad & Karimi-Doostan *in press*). In addition, the term "Kurdish" is loosely used as a cover term to include related languages Gorani (or Gûranî, Gurani) and Zazaki. These languages are considered Kurdish in a more socio-cultural sense. Linguistically, while sharing many features with the bulk of Kurdish, they show clear distinctions from Kurdish, which defy their linguistic categorisation within "Kurdish". Figure (1), taken from Sheyholislami (2021) represents the approximate distribution of five main groups that comprise Kurdish in the broadest sense. Notice that the author uses "Hawrami" as a cover term for Gorani.
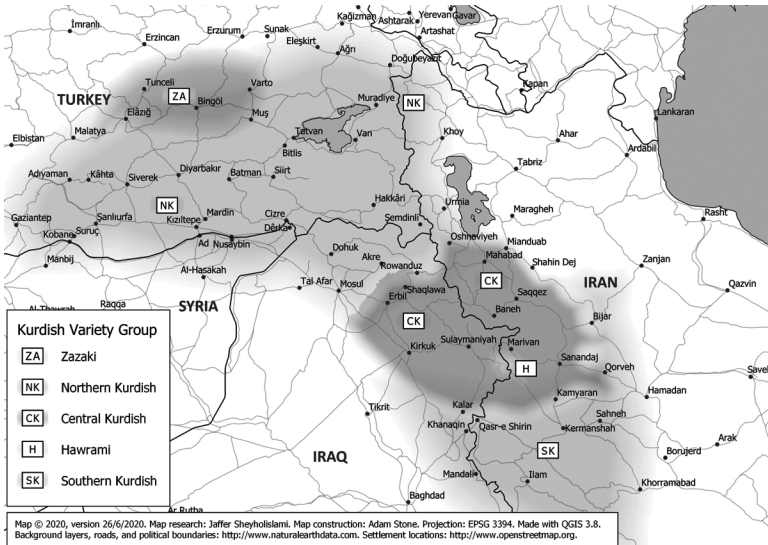
Figure 1. Map of the approximate distribution of five main groups generally called Kurdish

Within traditional Iranian philology, Kurdish and Gorani belong to the north-western branch of Iranian languages, while Persian and Luri are classified as members of the south-western group. It has long been known that Kurdish shares isoglosses with south-west Iranian languages and is intermediate between the two poles, whereas Zazaki and Gorani show more north-western traits (MacKenzie 1961a; Paul 1998). According to MacKenzie (1961a), this indicates that Kurdish must have been in contact with Persian in its formative stages. His hypothesis, along with those of other scholars, e.g., Lecoq (1997), implies that Kurdish was initially spoken in Central Iran. In contrast, Zazaki was spoken to the

south of the Caspian region. The northward migration of Kurds around the 2nd century BCE pushed Zazaki to Eastern Anatolia. From there, a group of Kurds migrated southward and overtook Gorani (see Öpengin 2021 for an overview of the history of Kurdish). The result was that the northern variety of Kurdish preserved its "purity", while the variety which converged with Gorani, i.e., CK, became less "conservative". The resulting CK variety later overtook Gorani almost entirely, leaving only small pockets of Gorani dialects within a sea of Kurdish (MacKenzie 1961a).

According to this scenario, Kurdish as a whole was a continuum of dialects, and the differences between CK and NK dialects originated in the southward migration of Kurds and their convergence with Gorani-speaking people. As a result, Gorani dialects were "overtaken" by Kurdish. The resulting Kurdish from this convergence zone (i.e., CK) differed significantly from the more conservative northern dialects. Table (1) illustrates some of the isoglosses which, according to MacKenzie, not only differentiate between SK/CK and NK but also indicate a Gorani substrate within the former groups, features which MacKenzie (1961a: 85) terms "direct borrowings" from Gorani.

Table 1. Some linguistic features distinguishing between CK and NK[a]

	Feature	Gorani	SK/CK	NK
i	person clitics	+	+	−
ii	a definite suffix -*eke*	+	+	−
iii	morphological passive	+	+	−
iv	open NP-compounds[b]	+	+	−
v	telic particle -*ewe*[c]	post-verb	post-verb	pre-verb

a. MacKenzie (1961a) further proposes that Gorani has triggered the preservation of person clitics in SK and CK, and has also led to the simplification of the nominal genitival system compared to the conservative system of NK.
b. Open compound NP is a type of definite NP consisting of a head noun and adjective connected by the ezafe linker *e*-, e.g., CK. *kuř-e cwan-eke* [boy-EZ young-DEF] 'the young boy' (MacKenzie 1961a: 83).
c. It seems that in a few Gorani dialects, e.g., Hawrami Luhon, this particle can appear as a pre-verb, but only in combination with the infinitive.

Alternative accounts of the history of Kurdish have been put forward ever since MacKenzie (1961a). Leezenberg (1992) questions the substratum hypothesis for two reasons. First, historical data do not convincingly indicate that the Gorani people were subjugated by their Kurdish-speaking neighbours, a point which runs against a substratum scenario. Second, the grammatical traits that, according to

MacKenzie, are indicative of Gorani substrate can be attributed to factors such as independent innovation and internal development. Independent innovation explains the loss of person clitics and morphological passive in Kurmanji (NK), features which have been attested since Old Iranian. According to Leezenberg, internal development triggers the simplification of the genitival construction in CK, a process which probably occurred as a consequence of the weakening of the nominal case system. The author thus refutes the Gorani substrate hypothesis, arguing convincingly that features such as the definite suffix -*aka* and open compound are too superficial to call for a Gorani substrate in CK.[1]

Instead, Leezenberg argues that the impact of Gorani on CK is most evident in the lexicon, which calls for "borrowing" rather than "substratum influence" (Thomason & Kaufman 1988). Gorani was the literary language that was used in the Kurdish principalities of Ardalan, based in Sanandaj, and in the neighbouring Baban principality, located in Sulaymaniyah (though in the latter it was later replaced by Sorani in the early 1800s). Because of its prestige and its role as a literary language, it is possible that CK extensively borrowed lexical items from Gorani. More recently, Jügel (2014) also questioned MacKenzie's conception of Gorani substrate influence on CK and its role in bringing about a split between CK and NK. He notes: "If Kurmanji spread into Gorani speaking territory and differences among Sorani and Kurmanji are due to the Gorani sub-stratum, it is hard to explain why today's Sorani does not have morphologically marked case, because today's Kurmanji and Gorani still preserve it" (Jügel 2014:129).

According to MacKenzie, the NK/CK split occurred because of the Gorani substrate, which drifted the resulting CK apart from the more conservative NK. Leezenberg refutes the substrata hypothesis (except in more recent times; see below) and cites factors such as prestige borrowing, independent development, and internal development as important in the CK/NK division. However, while both scholars tackle the history of Kurdish in much earlier times, it is also known that during the last two centuries some Gorani-speaking communities have shifted to Kurdish (see Section 2). Later studies posit different conceptions of the history of Kurdish. For instance, Jügel (2014) argues that Kurdish must have initially been composed of distinct but closely related subgroups (see Haig & Öpengin 2014, Matras 2019 for the same stance).

In sum, the existing accounts on the history of Kurdish differ in (i) the origin of Kurdish as being a unified whole vs. composed of distinct groups (see Öpengin 2021 for a helpful overview) and (ii) whether the influence of Gorani on CK is a matter of substrate or borrowing. The position taken in this paper advocates Kurdish being composed initially of distinct but closely related subgroups. The sub-

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1. See Karim (*forthcoming*) for a critical overview of Leezenberg's account.

strate question is more complicated and should be investigated separately for each dialect of Kurdish, combined with socio-historical evidence.

Against this background, this paper studies the Gorani substratum in the southernmost regions of the CK speech zone. Following the common usage, the term "Gorani" is used as a cover term in the paper for a group of Iranian languages with vernaculars of Hawrami as its most conservative dialects. Providing evidence of language shift in the last 150 years or so and combining it with the linguistic data of the CK dialects in the region, a picture emerges in which the southern CK dialects (hence SCK) differ in a good number of linguistic features from the northern CK dialects (NCK), differences which a Gorani substrate in the former group can explain. The CK dialect of Sanandaj (spoken in western Iran) is analysed as a case study of an SCK dialect that exhibits a Gorani substrate.

In doing so, Section 2 outlines anecdotes which illustrate the shift from Gorani to Kurdish in the SCK speech zones in the last two hundred to one hundred years. Section 3 gives a brief overview of the theoretical concepts of language contact. Section 4 investigates the Gorani substrate influence on SCK in different areas of grammar, including phonology, morphology, and syntax. Section 5 highlights Gorani borrowings found in SCK. Section 6 discusses some scenarios for the importation of Gorani features into SCK.

2.   Language shift in southern Kurdistan

As discussed in the previous section, the language shift from Gorani to CK has been debated in Kurdish linguistics. MacKenzie (1961a) advocates a wholesale shift of Gorani to CK since the southward movement of Kurds from the original Kurmanji-speaking territory. Leezenberg (1992), however, takes the opposite view in light of historical data (the role of Gorani as a literary language in the courts of Ardalan and Baban, leading to the prestigious status of Gorani, hence a case of borrowing), and reports, based on personal anecdotes in the field, that some Gorani communities in Iraqi Kurdistan have shifted to CK in recent times, as early as the second half of the 19th Century. Figure (2) represents a map of existing Gorani dialects:

A few points are worth mentioning regarding the map of Gorani dialects. First, the bulk of Gorani islands is situated south of CK-speaking areas, south of Kirkuk. Indeed, a good number are located in the SK speech zone. This could indicate that the contact between Gorani and CK has been more intense in these areas. Second, no known Gorani dialects exist in the Mukri variety of CK spoken around Mahabad in the north of the CK speech zone. This could mean, though not necessarily, that the CK dialect spoken in this area has not been under Gorani
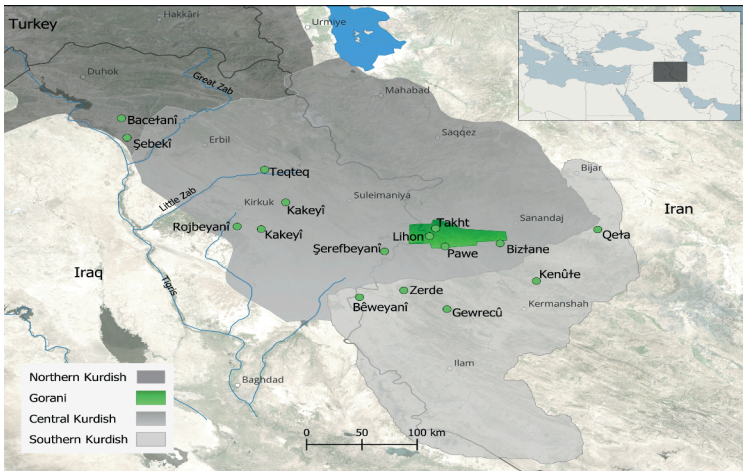
Figure 2. Map of traditional Gorani-speaking areas

influence, at least in recent times, as compared to, say, the CK dialects around Hal-abja (south of Suleimaniya) and Sanandaj, which are located next to the Gorani heartland, i.e., the Hawraman region on the border between Iran and Iraq. It is thus legitimate to examine linguistic variation between the CK dialects from these two regions, i.e., Mukri in the north and Sanandaj in the south, and to determine if the differences in the linguistic features can be accounted for by the presence of a Gorani substrate in the south of the CK speech zone.

There are several recorded anecdotes attesting to the shift from Gorani to Kurdish in recent times. As previously stated, Gorani was the court language of the Ardalan principality based in Sanandaj. In 1900, the Danish linguist Åge Meyer Benedictsen visited Sanandaj. In the introduction to the book *Les dialectes d'Awroman et de Pawa*, he reports on the language situation in Sanandaj. He writes that "learned people" in the city knew and spoke *Maço* (an epithet of Gorani/Hawrami, meaning 'he/she says'). He adds:

> 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 communé-ment entendu autrefois ('In Sänä [Sanandaj, Kurdish *Sine*], where Kurdish is now the common language outside of the Persian, Jewish and Syriac communities, it was claimed that Awromānī [Hawrami] had been commonly heard there in the past]. (Christensen & Benedictsen 1921: 5)

This quote shows that Gorani was once widely spoken in Sanandaj. A more recent account of the shift from Gorani to Kurdish in the town is given in Kurdistānī (1930). The author was a famous physician from Sanandaj named Dr. Sa'eed Khan Kordestani (1863–1943). He reports with sadness that when he returned to his

hometown after an absence of fifty years, "Hawrami, the original 'sweet' dialect of the city, is now completely extinct and can be seen spoken only by a handful of old women in the corners and alleyways of Sanandaj." (Kurdistānī 1930: 2).

This quote does not necessarily mean that the shift occurred within a period of fifty years. It is more likely that the city was inhabited by both Hawrami speakers and Kurdish speakers when Dr. Sa'eed Khan left the town. This could imply a situation of bilingualism in Sanandaj around 1880, in which the Gorani speakers were bilingual in Kurdish. This paves the way for drawing a picture of bilingualism in the region. While it seems that historically, the development would have been that of weak Kurdish-Gorani bilingualism (as supported by Leezenberg's account), in more recent times, the development would have been societal Gorani-Kurdish bilingualism > Kurdish monolingualism.

The shift from Gorani to Kurdish in Sanandaj coincides with a historical hallmark in the Sanandaj region, namely, the fall of the Ardalan dynasty in the second half of the 19th century. Recall that Gorani had institutional support during the Ardalan rule. Understandably, with the fall of the Ardalan dynasty, Gorani lost ground to an increasingly Kurdish-speaking population.

Similarly, Mahmoudveysi (2016: 3) reports that when Mann and Hadank (1930) conducted fieldwork among speakers in the localities of Bēwänījī, Rijābī and Gähwārāī around Kerend (in western Iran), they were speaking Gorani, but now they have shifted to vernaculars of SK.

There is clear evidence, therefore, of a language shift from Gorani to Kurdish in the Sanandaj region and, more broadly, in the southern regions of the CK speech zone bordering the SK-speaking areas. In fact, the Neo-Aramaic dialects in the region have recorded a trace of language shift from Gorani to Kurdish; this has been shown in detail in Khan & Mohammadirad (2023). The authors demonstrate that Gorani has far more impact on the Neo-Aramaic dialect of Sanandaj than Kurdish, reflecting that Gorani was once more widely spoken in the region. By contrast, the impact of Kurdish on the Jewish Neo-Aramaic dialect of Sanandaj is only marginal.

An additional note about the socio-linguistic history of the region is worth mentioning. Sanandaj, the capital of the Ardalan dynasty, was founded in the 17th century. It could be assumed that upon its founding and due to its increasing importance, Gorani and Kurdish speakers from different religious and linguistic backgrounds alike settled into the city. A relatively long period of symmetric (possibly weak) Gorani-Kurdish bilingualism followed, which, upon the fall of the Ardalan principality in the second half of the 19th century, gave way to the linguistic shift from Gorani to Kurdish. This scenario is supported by the personal anecdotes elaborated above.

To the best of my knowledge, there are no historical records on the socio-linguistic history of the region. Indeed, existing accounts remain speculative. Following Izady (1992), Ardalan (2004: 24–25) assumes that the Sanandaj region westward to Shahrezur (in the Suleimaniya region) was once populated by Gorani-speaking people who were followers of the Yarsan (Ahle-hagh) religion. These authors claim that Islam had only a superficial influence on the region until the beginning of the 17th century (i.e., the beginning of the Ardalan dynasty) and that Kurdish was introduced into the area within the same period. They then connect the linguistic shift from Gorani to Kurdish to the religious change from Yarsan to Islam. What follows from these accounts is that some Gorani people have kept their language and religion up until today (e.g., Gorani-speaking localities in Gawrajo, Zarda, Kandula). The majority of Gorani people who converted to Islam, however, shifted to Kurdish (barring the Hawraman region where language shift to Kurdish has not occurred).

Notwithstanding the differences in the above scenarios, both imply that the size of the Gorani-speaking population in the region was significant, which correlates with the assumptions in language shift studies that the size of the shifting population should be considerable enough for its linguistic features to be imposed to the language they are shifting to (Hickey 2010). In Section 4, it is seen that the Kurdish resulting from the Gorani substrate in the south of the CK speech zone differs in some crucial aspects from the Kurdish vernaculars in the north of the CK speech zone, particularly CK Mukri, which presumably does not show influence of Gorani substrate in recent times.

With this background in mind, the next legitimate question is to what extent the Kurdish dialect in and around Sanandaj shows Gorani substrate. In the next sections, the CK dialect of Sanandaj is examined as a case study of an SCK variety illustrating Gorani substrate features. It is essential to note that many of the features mentioned here as substrate features in CK Sanandaj also hold true of CK dialects to the south of the Sanandaj region in Iranian Kurdistan, (e.g., CK Jaffi).[2] To better understand the Gorani substrate in the south of the CK speech zone, linguistic features of SCK are compared with those of the northern Mukri CK variety, which, as said, does not seem to show Gorani substrate (at least in recent times).

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2. Jaffi is the CK vernacular of the Jaff tribe scattered at the southernmost end of the CK speech zone between Iranian and Iraqi Kurdistan. In Iran, it is the vernacular of localities such as Ravansar, Javanrud, and Salas-e Baba Jani. In Iraq, it is the vernacular of localities such as Kalar and Warmawa.

The Gorani data for this study come principally from a corpus of the Takht variety of Hawrami,[3] one of the most conservative dialects of Gorani (Mohammadirad *in prep*). A corpus of eleven texts forms the basis for investigating the CK dialect of the Sanandaj region as a representative of an SCK dialect (Mohammadirad 2022). Occasionally, reference is made to other CK dialects located south of the CK speech zone. Material for NCK dialects comes from the grammar of Mukri CK (Öpengin 2016) and a recent collection of folktales from the CK dialect of Shaqlawa in Khan et al.'s (2022) comparative study of Kurdish and Neo-Aramaic folklore.

3.   Mechanisms of language contact and language shift

One of the outcomes of linguistic contact is the linguistic shift from the language of one community, often the socially stigmatised group, to the language of the more dominant social group. A nexus of factors results in language shift, including social and economic factors, prestige and language ideologies, and historical trauma. Population size is another factor, although socio-economic and political factors are more decisive (Grenoble 2021). The mechanism involved in language shift is often referred to as "substratum influence", "interference", or "imposition" (among other terminologies), meaning that the shifting community imposes linguistic features from its native language to the more dominant language to which they are shifting to, i.e., the target language (TL). The TL resulting from the shift is often significantly different from the original TL (Winford 2003). The linguistic features which are involved in imposition are predominantly phonological and syntactic features; words enter the TL afterwards, and primarily for items that are absent therein, e.g., food and cultural items (Thomason & Kaufman 1988: 39). "Imposition" is therefore different from "borrowing", which typically involves incorporation of lexical and morphological material from a foreign language into

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3. One of the reviewers of the paper has objected that the historical contact situation in Sanandaj has been with the Zhawaro dialect of Hawrami, which is geographically closer to Sanandaj, rather than with the Takht dialect. It is notable that the linguistic zone of the Takht variety stretches close to Sanandaj, where in some localities it overlaps with the speech of the Zhawaro dialect. Among the three major varieties of Hawrami, there are more features shared between Takht and Zhawaro than between either of the two with the Luhon dialect (e.g., in the structure of the copula). This could mean that Takht and Zhawaro could be considered a dialect continuum. Another point to bear in mind is that since the founding of Sanandaj in the 17th century, Hawrami-speaking communities settled in the city. In principle, these early settlers could have come from any Hawrami speaking locality.

the borrowing language. Borrowing in this sense is identical to "matter borrow-ing", as termed by Matras and Sakel (2007).

Under the historical sociolinguistic framework of language shift in Thomason & Kaufman (1988), "substratum interference" occurs as a result of "imperfect learning" in shift situations, meaning that the shifting group has imperfect knowl-edge of the TL and imports structural features from its native language while shift-ing to the TL. Unlike borrowing, which could last centuries, the shift process can take "as little as one generation" (Thomason & Kaufman 1988: 41). In this model, intensity and duration of contact play distinct roles in borrowing and substratum interference.

Another important framework for language contact, put forward by Van Coetsem (1988) and Winford (2005), is based on the linguistic dominance of speakers of languages in contact. This approach distinguishes between two types of "agentivity" in contact-induced change; thus, "borrowing" and "imposition" are two main mechanisms of contact-induced change involving different agentiv-ity relations on the part of the speakers. In borrowing, recipient-language activity is at work, meaning that agents of change are speakers more linguistically domi-nant in the recipient language (RL) and less so in the source language (SL), from which material is transferred into the RL. An example is an English speaker using French words while speaking English. "Imposition", on the other hand, occurs due to SL-agentivity. Here, the speaker is linguistically dominant in the SL. Thus, grammatical structures and phonological features are replicated from the more dominant SL to the RL. An example is when a native speaker of French uses his articulatory speech habits while speaking English, the RL.

Given this background, some hypotheses can be made regarding language shift in the Sanandaj region, even though we still need to gain detailed knowledge of the sociolinguistic history of the area. It seems that the shifting Gorani popula-tion imposed its phonological and syntactic features on the Kurdish vernacular of the Sanandaj region under SL-agentivity. In other words, Gorani as the SL was the linguistically dominant language for the shifting Gorani group, who then imposed their phonological and syntactic features on Kurdish (i.e., the RL), which was the linguistically less dominant language for Gorani speakers (see Section 6 for dis-cussion).

A somewhat different aspect raised by the language contact situation between Gorani and CK is that these are genetically related languages that share much of their structure and genetic makeup. As stated above, they both belong to the north-western branch of Iranian languages. This makes it hard to distinguish the effects of contact-induced change from those of mutual inheritance and drift (see Epps, Huehnergard & Pat-El 2013). Indeed, it has been claimed that the sub-grouping of a language can be obscured due to extensive, prolonged contact (see

Aikhenvald 2001 on the subgrouping of Arawak). In works such as Pat-El (2013) and Bowern (2013), some criteria have been laid out to distinguish between internal change and external change. The problem in our case is that as historical records are lacking for Kurdish and Gorani, it is hard to apply methods of comparative historical linguistics to distinguish contact effects from inheritance. Nevertheless, in discussing convergent features, I attempt to link the current state of Kurdish and Gorani with cognate forms in Old Iranian.

On the other hand, there is evidence for a language shift from Gorani to Kurdish with a resultant substrate effect. This allows us to investigate the variation found within CK dialects by reference to the Gorani substrate in more recent times. The problem is that the substrate language was not documented during the shift. We, therefore, rely on speculation in some areas when discussing the effects of contact. In what follows, I try to distinguish between the effects of contact/substratum vs. mutual inheritance in discussing convergent features in Gorani and SCK.

4.   Shift-induced features in the southern dialects of CK

This section highlights linguistic features in the southern dialects of CK, which show the Gorani substrate. The CK dialect of the Sanandaj area is analysed as a case study. Occasionally, data is displayed from neighbouring dialects in the south of the CK speech zone. As said, the methodology is to compare SCK dialects with northern dialects of CK in light of the Gorani substrate in the former group.

4.1   Phonology

The phonological systems of CK and Gorani are quite similar. However, the two groups are distinguished based on some isoglosses. One known isogloss distinguishing between Kurdish and Gorani is the reflex Old Iranian post-vocalic *m. Historical /m/ in the post-vocalic slot is preserved in Gorani but is shifted to /v/ and /w/ in NK and CK, respectively (MacKenzie 1961a: 70).[4]

(1)   Old Iranian Gorani CK   NK
       Av. *nāman-* *namê* *naw*   *nav* 'name'
       hāmina   *hamin* *hawîn* *havîn* 'summer'

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4. To facilitate ease of comparison, all Kurdic examples are given in the "Hawar" standard Kurdish script. The characters that differ from their IPA equivalents are: î [i], ê [e], e [ɛ ~æ], a [a ~ ɑ], i [ɨ], u [ʊ], o [o], û [u], c [d͡ʒ], ç [t͡ʃ], j [ʒ], r [ɾ], ř [r], ş [ʃ], and y [j].

Paul (2008) considers the shift from *-m > -v/-w one of the most characteristic features of Kurdish, adding further that this shift might have started in the New Iranian period (beginning around the 7th Century CE). It is thus notable that Kurdish shows innovation concerning post-vocalic /m/. In some cases, however, the SCK group illustrates Gorani substrate by maintaining /m/ in the post-vocalic slot:

(2)   Gorani SCK   NCK NK
    dem   *dem* *dew* *dev* 'mouth'
    nîm   *nîm* *nîw* *nîv* 'half'
    siłam *siłam* *siław* *siłav* 'hello'

< Arabic *salām*

The presence in SCK of *m* in these inherited words and in the Arabic borrowing *salām* indicates that they have failed to undergo the characteristic sound change in common Kurdish. This could be associated with contact effects from Gorani, though note that the effect has been partial and remains limited to the words in (2).

    The second phonological feature is the preservation of the historical /w/ word-initially in Gorani, which in Kurdish undergoes fortition and is realised as a /b/:

(3)   Old Iranian   Gorani CK/NK
    Av. *vafra*   *wefr* *befr*   'snow'
    Pth., MP. *wārān* *waran* *baran*   'rain'

The SCK subgroup shows partial convergence with Gorani in this feature. Thus, in the intervocalic position, /b/ is lenited as /w/ in SCK, whereas NCK retains /b/ (see Mohammadirad & Öpengin *in press* for an overview of lenition in Kurdish).[5] This suggests that historical /w/ shifted to /b/ in Kurdish, which in SCK shifted back to /w/, intervocalically, due to the contact effect from Gorani. Noticeably, many SK dialects retain the historical /w/ word-initially, presumably due to Gorani influence.

(4)   Old Iranian   Gorani   SCK   NCK   NK
    YA. *vaēna* 'to see' *wîn-û / me-wîn-û e-wên-im de-**b**în-im di-**b**în-im* 'I see'
    YA. *vār* 'to rain'   *war-o / mi-war-o e-war-ê e-**b**ar-ê di-**b**ar-e* 'it rains'

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5. The Gorani impact can be better seen here in the SK dialects, e.g., *wa* 'wind'; *wehar* 'wind'; *waran* 'rain'.

The third feature concerns morpho-phonology. In SCK, under Gorani substrate, the sequence <st> tends to reduce to <s> in two contexts: (i) across syllable boundaries and (ii) syllable-finally as a result of total regressive assimilation. By contrast, NCK tends to retain the sequence <st> in these contexts.

(5) Gorani SCK   NCK
     /de.sûr/ /de.**s**ûr/ /de**s.t**ûr/ 'order' <Ar. *Dastur*
     des   *des*   *dest*   'hand' cf. NK *dest*

While the existence of this feature could be tentatively associated with contact effects from Gorani, a look at the SK dialects shows that many of these dialects undergo the same phonological reduction of <st> to <s> in the aforementioned phonological contexts (see Fattah 2000:183–185), a feature also shared by Laki (Lazard 1992) and vernaculars of Luri (Mackinnon 2002) further to the south. It is then possible that this morpho-phonological feature is a parallel innovation of a *Sprachbund*-like nature in these varieties and not necessarily a contact effect from Gorani in SCK.

Another feature showing convergence between Gorani and SCK is the assimilation of /n/ to /g/ in the sequence /ng/, resulting in a velar nasal /ŋ/ (see also MacKenzie 1961b:221 for SCK dialects of Suleimaniya and Warmawa from Iraqi Kurdistan). NCK lacks this feature:

(6) Gorani SCK NCK
     deŋ   *deŋ* *deng* 'voice'
     teŋ   *teŋ* *teng* 'tight'

However, the velar nasal /ŋ/ occurs extensively across many SK dialects (Fattah 2000:177), Laki, and possibly Luri dialects. Again, this feature in SCK could be due to *Sprachbund* spread reinforced due to contact with Gorani rather than emerging solely due to contact effects from Gorani. It can be said that the Gorani substrate has reinforced this split between the two poles of CK dialects.

Finally, MacKenzie mentions that the sequence /nd/ is reduced to /n/ and or /ŋ/ in SCK dialects of Suleimaniya and Warmawa, whereas the NCK dialect preserves it as /nd/ (1961b:221). Once again, the Gorani substrate apparently results in a split between SCK and NCK. Note that NCK shares these phonological features with the neighbouring Kurmanji dialects; see (7). But again, the same tendency as SCK is seen across SK dialects (Fattah 2000:185) and Laki and Luri dialects to the south. This feature can be more profitably seen as spreading through the southern regions of CK down to SK, Laki, and vernaculars of Luri.

(7) Gorani SCK   NCK

	Gorani	SCK	NCK		
	manîya	*manî, maŋû*	*mandû*	'tired'	cf. Bah. NK *mandî*
	anne	*ewne*	*ewende*	'that much'	cf. Bah. NK *hinde*
	çinne	*çen*	*çend, çendî*	'how many'	cf. Bah. NK *çend*

Another potential example of Gorani substrate in SCK is found in the past stem for the verb 'to say', i.e., *wit-/wut-* in SCK with word-initial /w/. Word-initial /w/ in the Old Iranian period turns either into /g/ or /b/, but the exact phonological conditions behind it are still unclear. The Kurdish varieties undergo the change from /w/ to /g/ or from /w/ to /b/. However, Gorani dialects tend to retain /w/, e.g., Gorani *werg* 'wolf' vs. K. *gurg/gurû*. In SCK varieties, there are words that suggest that the change from /w/ to /g/ occurred word-initially, e.g., *gurû* 'wolf' < Av. *vəhrka*. However, in SCK, the change does not happen in the past stem for the verb 'to say'. Thus, SCK dialects of Suleimaniya, Halabja, Sanandaj, and Kirkuk have *wut-* whereas the northernmost dialects have *gut-/kut-*, descending from *uxta-. Gorani uses *wat-* as the stem of 'say'. It appears that the shift from /g/ to /w/ in SCK dialects is due to contact effects from Gorani.

Overall, it can be said that the phonological traits distinguishing between NCK and SCK dialects are rather triggered by the *Sprachbund*-like nature of the spread of features extending over SCK, SK, Laki, and possibly Luri dialects. In other words, long-standing contact with neighbouring languages in the southern half of the CK-speaking region has led to some shared areal features. Alternatively, it might be possible to assume that Gorani speakers carried over their phonological traits into their production of CK. The L2 learning could have brought about this change in the SCK dialects, especially since no Gorani substrate account in NCK dialects is reported.[6]

4.2 Morphology

Gorani and vernaculars of SCK share several features in their morphosyntax. The first feature relates to stem morphology. In NCK varieties, the verb 'to say' is suppletive: the present stem is *ł-* whereas the past stem is *gut-*. The etymology of the present stem is not clear. In SCK and Gorani, the present and past stems derive from the same verb (Cheung 2006):

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6. Similarly, it is held that intervocalic lenition in French and Spanish, as opposed to Italian, was a substrate feature brought about by L2 learning of speakers of Celtic in their production of French and Spanish (see Joseph 2022: 51).

(8)   Gorani SCK
        PRS *waç-*   *êj-*   √*waç-*
        PST *wat-*   *wut-*   *uxta-

It can be seen that while NCK varieties developed the suppletive stem for 'to say', the SCK dialects, such as Sanandaj, retained the historical stem pair just as Gorani dialects did. In other words, contact with Gorani reinforced the preservation of old stem pairs in SCK.

The next candidates are features concerning the ordering of bound arguments. Here, two constructions exhibit identical characterisation in Gorani and SCK. The first construction concerns ordering bound person indices in non-canonical subject constructions (or dative subjects). In NCK, the typical pattern is for the index encoding the dative subject to follow the bound copula person form:

(9)   NCK (Shaqlawa dialect, (Khan et al. 2022: 219))
       serma=ît=im
       cold=COP.3SG=1SG
       'I am cold'.

The SCK dialects opt for the reverse order (10), the same as in the Gorani model (11):

(10)   CK Suleimaniya / Sanandaj
        serma=m=e
        cold=1SG=COP.3SG
        'I am cold'.

(11)   Hawrami Takht
        serd=m=a
        cold=1SG=COP.3SG
        'I am cold'.

It should be noted that the same ordering as (10) occurs in the Mukri dialects of Iranian Kurdistan and Persian. Likewise, the SK dialects have the same organisation as SCK and Gorani, suggesting mutual inheritance.

A relevant construction is the expression of person clitics and copula person markers on the existential stem *ha-* in predicative possessive constructions (see Mohammadirad *in press* for details). The basic pattern in NCK dialects is for the clitic to precede the copula index in this construction (12).

(12) CK Mukri, Suleimaniya
       he=man=e   cf. *he=ye* 'there is'
       EXIST=1PL=COP.3SG
       'We have (it)'.

Note, however, that in the CK dialect of the Erbil region, this ordering is reversed (13), where copula shows a stronger level of boundedness with the existential stem.

(13)   CK Erbil
    he-yt=man   cf. *he-yt* 'there is'
    EXIST-COP.3SG=1PL
    'We have (it)'.

Likewise, in SCK dialects such as CK Sanandaj, the copula person index is bounded to the existential stem, and the clitic person marker follows the sequence (14). The same construction occurs in Gorani (15):

(14)   CK Sanandaj, Kalar
    he=s=man   cf. *he=s* 'there is'
    EXIST=COP.3SG=1PL
    'We have (it)'.

(15)   Hawrami
    he=n=ma   cf. *he=n* 'there is'
    EXIST=COP.3SG.M=1PL
    'We have (it)'.

In short, in NCK dialects, the copula person marker is clearly treated as a clitic because it is displaced by person clitics, which are required to occur in the second position ever since Old Iranian. This seems to be a more archaic situation. By contrast, in Gorani and some varieties of SCK, there is a stronger level of boundedness between the copula person marker and the existential stem *he-*. This shows a shared innovation between SCK, Gorani, and CK Erbil.

Another construction potentially exhibiting shift-induced change in SCK is the ordering of argument-indexing formatives marking transitive subject (A) and direct object (O) in the periphery of verbal stems. In NCK, the ordering is V-A-O:[7]

(16)   CK Mukri, CK Suleimaniya[8]
    *nard=**tan-în***
    send.PST=**2PL:A-1PL:O**
    'You sent us (away)'.

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7. See Mohammadirad (2020) and Öpengin & Mohammadirad (2022) for overviews of bound person indices (pronominal clitics) across Kurdish.

8. It is notable that the CK dialect of Suleimaniya is a border case regarding Gorani substrate features. While its phonological features mostly align with the Gorani features elaborated on in

The SCK dialects exhibit the reverse ordering of A and O (17a)–(b), triggered by the same order of bound arguments in Gorani (18):

(17) CK Jaffi
    a. *henard-în=tan*
        send.PST=**1PL:O=2PL:A**
        'You sent us (away)'.
    b. CK Sanandaj
        nard=man=tan
        send.PST=**1PL:O=2PL:A**
        'You sent us (away)'.

(18) Hawrami
    kîyast-îmê=ta
    send.pst-**1PL:O=2PL:A**
    'You sent us (away)'.

On the basis of Examples (16)–(18), one might suggest that affixes are universally expected to occur closer to the stem, representing thus the original state of affairs. On this account, the Mukri ordering in (16), where the clitic precedes the affix, is the one needing explanation. However, it is notable that the O-indexing suffixes on past stems have historically arisen through the contraction of the stem for the verb 'to be' and the copular person markers. In other words, they were historically not original verbal affixes but the result of the univerbation of a copula with the participial form of the verb. The resulting suffixes have retained some traits of their clitichood, namely, they are not stress-bearing (like A-indexing person clitics) (see Öpengin 2019; Haig 2018). The issue is thus reduced to the ordering of two clitic-like person formatives in the periphery of past tense verb stems. The outcome of this development was the reverse ordering of clitics in Gorani in contrast to the core of CK dialects (Suleimaniya, Erbil, Mukri).

As remarked, the main point of divergence from the assumed original Kurdish pattern is the reversed ordering of bound person affixes indexing A and O in the southern dialects of CK spoken around Sanandaj. What is imported in (17a)–(b) from SCK is not morphological material since the paradigm of person indexing is quite different in Gorani. Instead, the morphological organisation of bound person markers has been imported from the Gorani model, an instance of "pattern replication" (see Mohammadirad *in press* for detailed discussion).

Section 2, the morphosyntactic features discussed in this paper groups it with northern dialects of CK.

Note that inflection on the verb is an area of language highly liable to error in second-language learning (cf. Clahsen & Muysken 1996). The reversed ordering of A and O indices in CK would have caused great difficulty for the shifting Gorani group, who were presumably, at the beginning, adult second-language learners of Kurdish. Therefore, the shifting Gorani population must have imposed the morphological organisation of bound person markers in the periphery of the verb to the CK they shifted to under SL-agentivity.

It should be mentioned that conservative Gorani dialects in the region have fusional nominal affixes which express case, gender, and number. Moreover, these conservative dialects exhibit gender marking in 3SG in verbal predicates. The SCK variety lacks these features. The lack of gender agreement on verbs is a feature of all Kurdish dialects. Assuming that the shifting Gorani group spoke a conservative dialect of Gorani, it can be said that Gorani features like case, number, and gender were not carried over into SCK by the shifting population as expected based on Nichols's (2003) study, which states that it is not clear that gender should be retained as a substratum feature.

Alternatively, it is possible that the shifting Gorani group in the SCK region had already lost morphological case and gender marking while shifting to Kurdish. It is only in the most conservative Hawrami dialects that morphological case and gender are fully retained (see MacKenzie 1966 for data on Hawrami Lihon). In the dialects outside the mountainous Hawraman region, these features are either weakened, e.g., the Gorani dialect of Zarda (Mahmoudveysi & Bailey 2013), or completely lost, e.g., Gorani Gawraju (Bailey 2018) and Bajalani (MacKenzie 1956).

Another point of divergence between the Gorani group and Kurdish is that the past progressive in the former consists of the present stem of the verb plus a past convertor suffix *-ên* (presumably derived from Old Iranian optative ending **-ant)* to which the person suffixes are added, e.g., *ê-ên-î* [come.PRS-PSTC-2SG] 'You were coming', whereas in Kurdish, the past stem of the verb is used *e-hat-î* [IPFV-come.PST-2SG]. The reason behind non-convergence in the formation of past progressive in SCK seems to be that in L2 learning and language shift situations, morphological features are from the TL (or the RL) (Muysken 2010), in this case, Kurdish. Note further that there is a lack of structural equivalence in the expression of past progressive, rendering it hard to be transferred to the TL. Another factor which might have inhibited the transfer of the past progressive construction to Kurdish is the high integration of this construction within the morphosyntax of almost all Gorani dialects, which makes it less likely to be transferred (see Bowern 2013 on this point).

Overall, the replication of the Gorani pattern of argument indexing in CK is in line with Moravcsik's generalisation that grammatical patterns cannot be bor-

rowed without their ordering properties (Moravcsik 1978: 112). It further confirms Muysken's (2010: 273) point that in language shift situations, abstract features tend to be transferred from the substrate language to the dominant language.

4.3   Syntax

This section highlights structural features in SCK, which exhibit Gorani substrate. Recall that imposition is primarily involved with morphosyntactic and phonological features.

Kurdish dialects have so-called particle verb constructions, in which the particle is ultimately derived from a preposition. Across NCK dialects, the particle comes before the verb:

(18)   NCK
   a.   ***lê=y   da***
         PTCL=3SG give.PST
         'He hit (him)'.
   b.   ***pê=yan   kenî-∅***
         PTCL =3PL laugh-3SG
         'They laughed at him'.
   c.   ***lê=y   e-xuř-in***
         PTCL=3SG IND-shout.PRS-3PL
         'They shout at him'.
   d.   ***pê=y   zanî***
         PTCL=3SG know.PST
         'He learned about it'.

By contrast, in CK Sanandaj (and more broadly in SCK), following the Gorani model, the particle comes after the verb:

(19)   SCK   Gorani
   a.   *da=y   **lê=y***   *da=ş   **vene***
         give.PST=3SG PTCL=3SG   give.PST=3SG PTCL
         'He hit him'.   'He hit him'.
   b.   *kenî-n   **pê=y**[9]*   *xuwê=š   **pene***
         laugh.PST-3PL PTCL=3SG   laugh.PST.3PL-3SG PTCL
         'They laughed at him'.   'They laughed at him'.
   c.   *e-xuř-in   **lê=y***   *xuř-a=š   **vene***
         IND-shout.PRS-3PL PTCL=3SG   shout.PRS-3PL=3SG PTCL=3SG
         'They shout at him'.   'They shout at him'.
   d.   *zanî   **pê=y***   *zana=ş   **pene***
         know.PST.3SG PTCL=3SG   know.PST=3SG PTCL
         'He learned about it'.   'He learned about it'.

The clitic placement in Gorani (Hawrami) and SCK is different, as seen in the examples in (19). Yet, it is notable that the positioning of the preposition complement clitic in (19a)–(19d) in SCK is a possible placement in CK in general. The fact that this placement in post-verbal position has become the default is because it is echoing the Gorani model.

Another construction distinguishing CK dialects is the positioning of the prepositional phrase complement of some complex predicates. The predicate in such constructions can have an inceptive sense. Consider the following examples from NCK varieties of Mukri and Shaqlawa:

(20) NCK
    a. [[***be ciwab***]$_{pp}$ *hat*]$_{cp}$
        to   response come.PST.3SG
        'He started to speak'.
    b. ***be cê=yan   hêşt***
        to place=3PL leave.PST
        'They left (it) behind'.
    c. ***be cê   ma***
        to place remain.PST.3SG
        'It was left behind'.
    d. ***we řê   e-kew-ê***
        to road IND-fall.PRS-3SG
        'He sets off'.
    e. ***be ʕarz-î   da   kewt***
        to earth-OBL.M POST fall.PST.3SG
        'He fell on the ground'.

By contrast, in SCK dialects such as CK Sanandaj, the prepositional complement is realised after the light verb (21). It is noteworthy that in SCK, the preposition *be* is cliticised to the verb here, resulting in a directional clitic. The corresponding constructions in Gorani yield the exact ordering.

(21)   SCK   Gorani
    a. *hat=e   cuwaw ama   cuwab*
      come.PST.3SG=DRCT response come.PST.3SG response
      'He started to speak'.   'He started to speak'.
    b. *hêşt=yan=e   cê   ast=şa   cîya*
      leave.PST=3PL=DRCT place leave.PST=3PL place
      'They left (it) behind'.   'They left (it) behind'.

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9. This particle verb construction can also appear as *pê kenîn* in SCK dialects.

c. *ma   cê*   *mena   cîya*
   remain.PST.3SG place   remain.PST.3SG place
   'It was left behind'.   'It was left behind'.

d. *e-kef-êt=e   řê*   *gin-o   řa*
   IND-fall.PRS-3SG=DRCT road   fall.PRS-3SG road
   'He sets off'.   'He sets off'.

e. *keft=e   zewî*   *kot   zemîn-î*
   fall.PST.3SG=DRCT earth   fall.PST.3SG earth-OBL.M
   'He fell on the ground'.   'He fell on the ground'.

As can be seen in (21), the Gorani substrate has seemingly resulted in the post-verbal positioning of the light-verb complement in SCK. In contrast, such a complement is placed pre-verbally in the NCK dialects.

The structure of a locational copula construction is a further feature distinguishing between NCK and SCK dialects (cf. Mohammadirad *forthcoming*). In the former, the locative phrase appears before the clitic copula:

(22) NCK
      le mał=im
      at home=COP.1SG
      'I am at home'.

In SCK, the locative copula construction consists of a deictic element to which the copula person index attaches. Moreover, the locative phrase appears in the post-verbal slot (23), preceded by the cliticised form of the preposition *le* 'in'. This replicates the pattern in the Gorani substrate (24).[10]

(23) SCK
      ha=m=e   *mał*
      DEIC=COP.1SG=at home
      'I am at home'.

(24) Gorani
      îna=nê   *yane-ne*
      DEIC=1SG.COP home-POST
      'I am at home'.

The last feature concerns the word order profile. Kurdish and Gorani have the basic SOV order. Nonetheless, some arguments, e.g., goals of verbs of movement, regularly appear post-verbally (see Haig 2022, Mohammadirad *forthcoming*). CK dialects show variation in the placement of addressees of the verb 'say/tell'. In CK Mukri, addressees are predominantly pre-verbal (25), a pattern which seems to

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10. This has resurfaced as a substrate feature in some SK dialects as well.

reflect its historical placement, as can be seen in an example from Middle Persian in (26).

(25) CK Mukri   (Öpengin 2016: 200)
      be jin û   kiç-eke=y   **kut-û-w=e**
      to wife and daughter-DEF=3SG say.PST-PTCP-EP=PERF
      'He has said to his wife and daughter'.

(26) Middle Persian   (Durkin-Meisterernst 2014: 275, mpB.60)
      u=ş   o mêr-ag   guft
      PTCL=3SG to man-DIM say.PST
      'He said to the young man'.

Conversely, CK Sanandaj shares with Gorani the post-verbal placement of addressees of 'say/tell'. The post-verbal placement of addressees in Gorani might in turn be due to long-standing contact with Semitic languages such as Aramaic and Arabic.

(27) CK Sanandaj   (Mohammadirad 2022, sentence number 0341)
      wit=î   be minał-ekan=î
      say.PST=3SG to child-DEF.PL=3SG
      'She said to her children'.

(28) Gorani   (Mohammadirad *in prep*)
      m-aç-o   be tate-y=ş
      IND-say.PRS-3SG to father-OBL.M=3SG
      'She said to her father'.

To better understand the role of Gorani substrate in the positioning of addressees, I did a frequency count of nominal addressees of 'say/tell' in the corpora from which the above examples were taken: Hawrami Takht (Mohammadirad *in prep*: 20 clauses); CK Mukri (Öpengin 2016: 12 clauses), and CK Sanandaj (Mohammadirad 2022: 13 clauses). The percentages of post-verbal addressees are shown in Figure (3):

It can be seen from Figure 3 that CK Sanandaj sticks to the Hawrami pattern of post-verbal placement of addressees, which is above 90%, whereas CK Mukri prefers the opposite directionality (0% of post-verbal nominal addressees (see Mohammadirad *forthcoming* for a detailed discussion)).

Taken together, the syntactic features of SCK addressed in this section demonstrate cases of constructional calque (or "metatypye" in terms of Ross 2019) from the Gorani substrate. In other words, these features are induced by the shift from Gorani to Kurdish in CK Sanandaj and probably more broadly in the southern half of the CK speech zone. The metatypye has resulted in opposing directionalities in the morphosyntax of SCK compared to the NCK dialects.
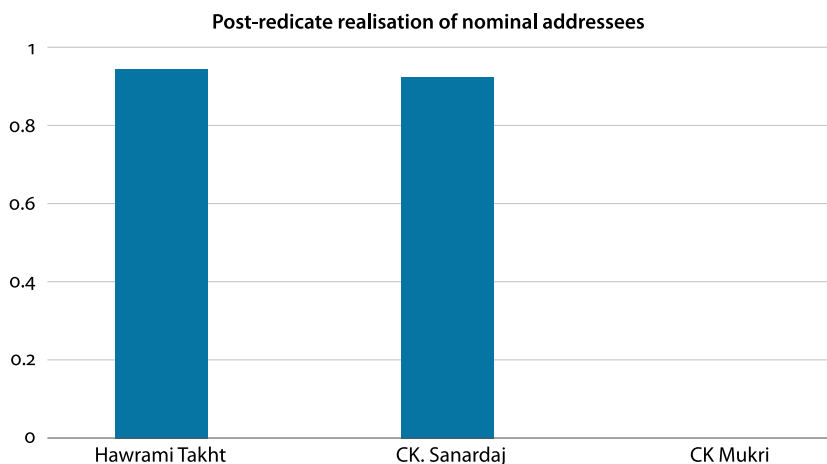
Figure 3. Post-predicate positioning of nominal addresses in Hawrami Takht, CK Sanandaj, and CK Mukri

5.   Gorani borrowings in SCK

The previous section highlighted that many phonological, morpho-phonological, morphological, and structural features in SCK exhibit Gorani substrate under SL-agentivity. Additionally, long-standing contact with Gorani has led to considerable borrowing of the lexicon into SCK. Consider the borrowings in the domain of kin terms:

(29) | Hawrami | SCK | NCK | |
       |---------|-----|-----|--|
       | *lalo, lale* | *lale, (xało)* | *xał* | 'maternal uncle' |
       | *weywe* | *wewî, weyî* | *bûk* | 'bride, daughter-in-law' |
       | *baba* | *bawa* | *bapîr* | 'grandfather' |
       | *bawejenî* | *bawejin* | *ziř-dayk* | 'stepmother' |
       | *bawepîyare* | *bawepîyare* | *ziř-bawk* | 'stepfather' |
       | *hêver* | *hêwer* | *şûbira* | 'brother of husband' |
       | *hêverjenî* | *hêwerjin* | *şûbirajin* | 'wife of brother of husband' |

A feature of these loanwords in SCK is that they refer to the family's senior members, or in the case of 'brother of husband' and 'wife of brother of husband' to extended family members. Family members who are equal in seniority, e.g., 'sister': CK. *xoşk*; Hawramî *wałe*, have not been borrowed. This reflects politeness in social situations. The mere fact that these terms in SCK have been borrowed from Gorani, and not vice versa, could indicate not only the historical prestige associated with Gorani in Sanandaj region–recall that Gorani was the court language

during Ardalan rule in Sanandaj–, but perhaps also that Gorani was socially dominant in the far past in the Sanandaj region.

The lexical items in (30) are representative of some body part terms which have been borrowed into SCK from Gorani.

(30) Hawrami CK Sanandaj NCK

gulk, gilk	kilk	qamik	'finger'
zwan	zwan	ziman	'tongue'
tewêłe	têweł	nêwçawan	'forehead'
lûte	lût	kepo	'nose'

Generally considered a closed class, body part domain is a universal semantic domain whose terminology is highly resistant to borrowing due to their being basic vocabulary and thus being among early items in the lexicon (Tadmor 2009). However, it has been shown that social factors, such as prestige, taboo, and art, can outrank linguistic inhibitions on the borrowability of body-part terminology (Pattillo 2021). In the case of Gorani borrowings in (30), it seems that borrowing the body-part terminology in SCK is motivated by the historical prestige associated with Gorani in the Sanandaj region.

Consider also the following examples displaying Gorani borrowings in SCK of basic adjectives and a few colour terms:

(31) Hawrami CK Sanandaj NCK

kewe	kew	şîn	'blue'
çerme	çermû, çermig	sipî	'white'
berz	berz	bilind, berz	'high'
kuł	kuł	kurt	'short'
qayim	qayim	stûr	'thick'
fire	fire	zor	'many, much'

Excepting colour terms, the adjectives in (31) typically indicate value and emotive expressions towards something or someone. It is thus possible that the prestigious status of Gorani motivated their borrowing into CK.

The category of adverbs has also seen Gorani influence in the SCK speech zone, see (32). The adjective meaning 'many, much' can be used adverbially within Kurdish.

(32) Hawrami   CK Sanandaj NCK

fire	fire	zor, gelek	'very'
gahen/gahes	gahes	bełkû	'maybe'
ewsa	ewsa	ew kat, pêşan	'a while ago'
dêr	dêr	direng	'late'

Gorani borrowings have also entered other word class categories. SCK has adopted some verb stems from Gorani which are not shared in NCK:

(33)   Hawrami SCK   NCK
       PRS *san-*   *sen-*   *kiř-*   'to buy'
       PST *sana-*   *senî-*   *kiřî-*
       PRS *ar-*   *êr-*   *hên-*   'to bring'
       PST *ard-*   *hawird-* *hêna*
       PRS *(a)jnî-*   *jinef-*   *bîs-*   'listen'
       PST *(a)jnîye*   *jineft-*   *bîst-*

The verb 'bring' is an interesting case. The initial *h* in *hawird-* is from the PIE second laryngeal, which remains word-initially in Kurdish and is lost in Gorani. *hawird-* is from the preverb *(H)ā* 'to(ward)' and *bara* 'carry'. *hêna-* is from the preverb *(H)ā* 'to(ward)' and *naiH¹* 'lead' (see Cheung 2006: 6–10). They likely both occurred in Kurdish perhaps with an original animacy distinction. It seems that the retention of *hawirdin* over *hênan* in SCK was likely influenced by Gorani.

The verb *sanay* 'to buy' also means 'to take' in Gorani. This semantic extension has been copied to CK dialects of the region. In NCK dialects, however, *sendin* only means 'to take', whereas 'to buy' is expressed by the stem *kiř-*.

It is hard to accommodate these Gorani-borrowed verb stems in SCK under shift, since in shift situations words are often borrowed for which the TL has no equivalence. The Gorani substrate has also led to the adoption in SCK of the modality verb 'should' (like French *il faut*), which expresses deontic necessity. The NCK group uses another verb stem as an equivalence:

(34)   Hawrami SCK NCK   NK
       mi-şî-o   e-ş-ê e-b-ê /de-b-ê di-vê 'one should'

A final set of borrowings into SCK are discourse particles associated with information management in larger stretches of discourse. It is generally held that grammatical structures larger than the clause are susceptible to substratum effects. These include, in particular, strategies for clause linking (Mithun 2011: 108). The first feature is the additive particle meaning 'too, also, even', borrowed from Gorani into SCK. The common Kurdish form is *=î ş*:

(35)   Hawrami   *=îç*
       CK Sanandaj *=îç*
       NCK, SK   *=îş*

A second candidate is the discourse particle *sa*, meaning 'well, then' in Gorani (36) and SCK (37). This particle does not occur in NCK.

(36) Hawrami Takht (Khan & Mohammadirad 2023: 562)
*e çê=ç **sa** ser-ê duê ser-ê heywan sere biř-ên-ê-û*
PRSNT here=ADD well CLF-INDF two CLF-PL animal head cut.PRS-PSTC-3PL=and
'Here [at the bride's family], well then they would behead one or two animals'.

(37) CK Sanandaj
*min be em kawra **sa** pena be xwa*
1SG IMP.give.2SG DEM.PROX man well refuge to God
'Give me to this man. Well then let us take refuge in God'.

Finally, the particles meaning 'if' and 'until' can appear either in the simple form or with what seems to be an intensification suffix in SCK and Gorani. In the NCK dialects, only the simple forms occur.

(38) Hawrami   CK Sanandaj   CK Mukri
eger, eger-kete eger, eger-kete eger   'if'
heta, heta-kete heta, heta-kete heta   'until, till'

The borrowing of these highly discourse-based particles from Gorani shows that discourse management follows the Gorani model in SCK, as examples (36) and (37) suggest.

To sum up, this section exemplified Gorani borrowings into SCK. The socio-historical situation under which these borrowings entered SCK was probably one in which Gorani was a literary language that was used as such not only by Gorani native speakers but also by Kurds, Lurs, and others during the 17th–19th centuries. This means that the Kurds had some knowledge of Gorani through literary Gorani or contact with Gorani-speaking communities. It was seen that the Gorani borrowings had entered the core vocabulary of SCK, causing a split between CK varieties. The motivation behind these borrowings was said to be the formality and the prestige associated with Gorani in the Sanandaj region. As remarked, Gorani was the court language and the language of verse during the Ardalan dynasty in the region. Given this social prestige associated with Gorani, it is thus understandable that a core lexicon comprised of some body parts and kinship terms was borrowed into SCK despite linguistic inhibitions against their borrowability. The borrowing of discourse particles, on the other hand, shows that larger stretches of discourse are aligned the same way in Gorani and CK Sanandaj. This could be more profitably seen as an instance of substratum influence (Mithun 2011).

So far, we have seen that the Gorani-induced features in SCK involve both imposition and borrowing, though the weight of the former seems to be heavier. In the next section, we develop some hypotheses to accommodate both of these mechanisms in the contact situation within CK Sanandaj.

6.   Discussion

We have seen that SCK dialects exhibit Gorani substrate in nearly all levels of grammar (see Section 4). The mechanism involved here was said to be "imposition" under the agentivity of the Gorani-dominant shifting group. The following list summarises the features in SCK which seemingly exhibit Gorani substrate:

– occasional maintenance of post-vocalic *m
– lenition of intervocalic /b/
– reduction of the sequence <st> to /s/ across syllable-boundaries
– the assimilation of /n/ to /g/ resulting in a velar nasal /ŋ/
– reduction of the sequence <nd> to /n/ across syllable boundaries
– preservation of regular stem pairs for the verb 'to say'
– degree of boundedness of the 3SG copula person marker and the existential stem
– the ordering of copula person markers and person clitics on the existential stem
– the ordering of A and O bound indices in the periphery of the past tense verb stems
– the ordering of verbs and particles in particle verb constructions
– the ordering in light verb constructions where the complement is a prepositional phrase
– the structure of locational copula constructions
– the constituent ordering of oblique arguments, e.g., addressees of 'say, tell'

The list above involves features from phonology, phonotactics, morphology, and syntax. These features are expected to be transferred from one language to another in contact situations where one language becomes substrate to another. It can be seen that as a result of contact, the SCK dialects have become structurally similar to Gorani and have diverged from the general CK block.

However, the issue is more complex since Gorani and Kurdish are genetically related languages. This leads us to consider that some convergent features between the two languages did not arise in SCK through contact effects from Gorani, but—as discussed throughout the paper—resulted rather from mutual inheritance and *Sprachbund*-like spread of features. Table (2) summarises the SCK features and possible interpretations of how they come about. Note that it is not easy to tease apart inheritance from effects of the linguistic area in discussing the linguistic features of SCK, as is common elsewhere (see Bowern 2013), given also that there is evidence for language shift. One reason is that neighbouring languages such as SK, Laki, and Luri are poorly studied.

Table 2. Linguistic features of SCK and possible interpretation of their origin

	Inheritance	Areal effect	Innovation in SCK due to Gorani substrate
Occasional maintenance of post-vocalic *m		✓	
Lenition of intervocalic /b/		✓	
Reduction of the sequence <st> to /s/		✓	
Reduction of the sequence <nd> to /n/		✓	
Preservation of regular stem pairs for the verb 'to say'			✓
Boundedness of the 3SG copula with the existential stem			✓ [d]
The ordering of copula person markers and person clitics on the existential stem	✓	✓	
The ordering of A and O bound indices in past tense verbs			✓
The ordering of verbs and particles in particle verb constructions			✓
The ordering in light verb constructions			✓
The structure of locational copula constructions			✓
The constituent ordering of "addressees"			✓

d. This is more profitably a case of shared innovation, see Section 4.2.

The findings of this paper show that Gorani-originated features have been transferred to SCK across every aspect of the phonology, morphology, syntax, and lexicon; even areas which, in the literature on language contact, are claimed to be highly resistant to borrowing, e.g., basic vocabulary items and the organisation of bound morphemes. This reflects not only that linguistic constraints are secondary in contact-induced change (see also Thomason 2008) but also that linguistic restrictions are less stringent in contact situations involving genetically related languages (see also Mithun 2013), e.g., copying the organisation of bound morphology.

We have also seen that some core lexicon and discourse particles in SCK are better seen as borrowings from Gorani than deriving from common Kurdish. Recall that imposition typically involves phonological and syntactic features; lexicon is entered but usually only for concepts that are missing in the TL (Thomason & Kauffman 1988). Given that borrowing and imposition involve different agentivity relations on the part of speakers of languages in contact, the question arises

regarding how to accommodate lexical borrowing and imposition within the contact situation in the SCK-speaking region.

It seems that borrowing and imposition reflect different layers of historical contact in SCK. Under this scenario, before the shift from Gorani to Kurdish happened, a symmetric (possibly weak) Kurdish-Gorani bilingualism pattern existed in the region, which, combined with the social prestige associated with Gorani, led to the importation of lexicon from Gorani to Kurdish under RL-agentivity of Kurdish-dominant speakers. Recall that during the 17th–19th centuries, literary Gorani was used by Kurds and others. This, combined with some level of bilingualism in Gorani, could have led to the introduction of Gorani borrowings into SCK dialects. This might reveal that social attitudes towards the speakers of the source language mitigated the RL speakers' perception of the two groups' differences, resulting in the flow of linguistic features from Gorani to Kurdish.

Later, with the language shift from the Gorani-speaking population in the late 19th century/early 20th century, phonological and morphosyntactic features of the sort mentioned above entered Kurdish through L2 learning by Gorani-dominant speakers in their production of Kurdish.

Alternatively, as noted by Winford (2005), speakers of languages in contact can exert different agentivity relations simultaneously. This could mean that the Kurdish-dominant speakers were actively borrowing lexicon from Gorani (under RL-agentivity), while the shifting Gorani group imposed syntactic and phonological features on Kurdish under SL-agentivity.

Given the lack of historical data about the sociolinguistic situation of the region in the past, either of the aforementioned scenarios seems plausible. However, the longstanding contact between Gorani and Kurdish in this southern half of the CK speech zone suggests that it is more probable that Gorani borrowings entered CK Sanandaj well before Gorani-dominant speakers shifted to Kurdish.

Turning back now to the discussions on the Gorani substrate within CK, this paper shows (in line with Leezenberg (1992)) that prestige has played a role in Gorani borrowings into SCK, but it also demonstrates that shift-induced features have entered SCK through the agency of Gorani-dominant shifting group.

It is also noteworthy that the existing accounts on the history of Kurdish often overlook the dialectal variation within CK dialects. As this paper has shown, only by detailed investigation of individual dialects can one eventually get a sound picture of linguistic outcomes of language contact between Gorani and Kurdish. In doing so, the socio-linguistic history of the region should be well understood before jumping to any hasty conclusions.

As stated above, some phonological and morphosyntactic features entered Kurdish through L2 learning of Gorani-dominant speakers in their production of Kurdish. Some scenarios can be highlighted here regarding the second-language

learning of Gorani-dominant speakers of Kurdish in SCK-speaking regions. First, it appears that the size of the shifting Gorani population was large enough for its phonological and morphosyntactic features to be transferred to CK as the TL. Put differently, the shifters' variety of Kurdish was able to influence the (Central) Kurdish spoken in the south as a whole because the shifting Gorani population was numerous in size and, in such situations, it is expected that the interference features be stabilised in the TL, similar to the rise of Irish English resulting from Irish speakers shifting to English (see Hickey 2007, 2010, among others).

The shift from Gorani to Kurdish happened rapidly, probably occurring over two generations at most (see above). In this situation, it is conceivable that most of the shifting population were either adult second-language learners of Kurdish or Gorani-dominant bilinguals. This shifting situation can be characterised by imperfect learning, overgeneralisation, etc., which can explain many substrate features highlighted in Section 4. By way of example, the reverse ordering of bound indices indexing O and A in the periphery of the verb in CK and Gorani would have caused difficulty for the shifting Gorani population (see Section 4.2). This was resolved by imposing the Gorani pattern of ordering bound argument indices on their production of CK as the TL.

Additionally, it appears that the shift to Kurdish occurred in an unguided, non-prescriptive manner since there was no formal education in Kurdish. As a result, a situation of collective second-language acquisition can be reflected here. Two of the processes typical of unguided adult language acquisition include the removal of redundancy and reduction in structural distinctions. The former is the case, for instance, with the omission of agreement targets in the shifters' variety of Kurdish.

(39)   a.   Hawrami
          jen-ê   xas-ê
          woman-PL good-PL
       b.   CK Sanandaj
          jin-gel   xas
          woman-PL good
          'good women'

In (39), although the plural markers used are of different origins, it can be seen that in Gorani Hawrami, both the adjective and the noun inflect for number. By contrast, in CK Sanandaj, this semantic information is expressed only once.

Reduction in structural distinctions is seen in the expression of bound argument indices expressing A and O through historically suffixal morphology and clitic pronouns. The issue is complex and can be touched upon only superficially here. Following the rise of ergativity since the Middle Iranian period, the system

of argument indexing underwent significant changes. One consequence of this was that the indexing of direct objects through suffixal morphology in the past tense was co-opted for the adposition complements (see Haig 2018; Mohammadirad 2020 for details), as demonstrated in (40a) for Gorani and (40b) for NCK.

(40) a. Hawrami
          vat-î=m   ***pene***
          say.PST-**2SG**=1SG **to**
          'I told you'.
      b. NCK
          ***pê*=m**   *gut-î*
          to=1SG say.PST-**2SG**
          'I told you'.

Most SCK dialects differ from Gorani (Hawrami) and NCK in two respects: first, the adposition complement is expressed by a clitic pronoun; second, unlike the in-distance realisation in Gorani (Hawrami) and NCK, the complement of the preposition is realised locally on the adposition:

(41) SCK
      wit=im   ***pê*=t**
      say.PST-1SG **to=2SG**
      'I told you'.

As can be seen, the SCK construction in (41) is less complex than Gorani for the reasons just mentioned. While some contemporary Iranian languages show the same development as SCK, and a case can be made for parallel development, it is equally possible that the change in SCK came about through the imperfect learning on the part of the shifting Gorani population. Note that the adposition is placed post-verbally in both Gorani and SCK, reflecting a case of metatypy as seen in Section 4.3.

A relevant question is what the Gorani substrate can reveal about the dialectology of CK dialects. While this awaits further research on individual Kurdish dialects, it is notable that the CK dialect of Suleimaniya is geographically placed at the intersect of isoglosses, which differentiate between SCK dialects and northern ones. CK Suleimaniya behaves like SCK dialects in terms of the phonological features discussed in Section 4.1, whereas the morphosyntactic features link it to the

NCK dialects. This could highlight the effect of complex areal and social factors in the development of the CK dialects of this region.[11]

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Abbreviations

A	transitive subject	O	object
ADD	additive	PERF	perfect
CLF	classifier	PL	plural
COP	copula	POST	postposition
CP	complex predicate	PP	prepositional phrase
DEF	definite	PROX	proximate
DEM	demonstrative	PRS	present
DIM	diminutive	PRSNT	presentative
DRCT	directional	PST	past
EP	epenthesis	PSTC	past convertor formative
EZ	ezafe linker	PTCL	particle
IMP	imperative	PTCP	participle
IND	indicative	PTSTC	past convertor suffix
INDF	indefinite	Ar.	Arabic
INF	infinitive	Av.	Avestan
IPFV	imperfective	Bah.	Bahdini Northern Kurdish

11.   Relatedly, it is worth mentioning that a sizeable number of linguistic features mentioned as cases of Gorani substrate with SCK are also shared in the neighbouring SK dialects. Given that there are reports of linguistic shift from Gorani to SK (e.g., Mahmoudveysi 2016), those features are also expected in SK. However, nothing can be claimed with certainty here until the Gorani substrate is thoroughly investigated for individual SK dialects.

CK	Central Kurdish		SK	Southern Kurdish
K.	Kurdish		SCK	Southern Central Kurdish
MP.	Middle Persian		SL	Source language
NK	Northern Kurdish		TL	Target language
Pth	Parthian		YA.	Young Avestan
RL	Recipient language			

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