Geoffrey Khan and Masoud Mohammadirad

5 Gorani influence on NENA

Abstract: North-eastern dialects of Neo-Aramaic (NENA) have a long history in northern Mesopotamia. Vernaculars of NENA have been in contact with Iranian, Semitic, Armenian, and Turkic languages. Kurdish has often been assumed to be the language that has had the most crucial influence on the morphosyntax of NENA dialects. This paper shows the impact of Gorani on NENA, highlighting that Gorani has had a deeper impact on NENA than Kurdish. The Jewish Neo-Aramaic dialect of Sanandaj is presented as a case study. Our survey shows that features of Gorani origin in Jewish NENA are the result of both imposition and borrowing. Adopting Van Coetsem's (1988) model of language contact, we argue that borrowing and imposition reflect different layers of historical contact between Gorani and NENA, suggesting a shift in the linguistic dominance of NENA speakers.

Keywords: language shift, convergence, imposition, borrowing, agentivity

1 Preliminary remarks

Spoken vernacular varieties of Aramaic, generally known as Neo-Aramaic dialects, have survived down to modern times in four subgroups: Central Neo-Aramaic (spoken in south-eastern Turkey west of the Tigris); North-Eastern Neo-Aramaic (or NENA), spoken in Northern Iraq east of the Tigris, Western Iran and south-eastern Turkey; Neo-Mandaic (spoken in south-western Iran); and Western Neo-Aramaic (spoken in the north of Damascus).

The Neo-Aramaic dialects spoken in the region of Sanandaj belong to the North-Eastern Neo-Aramaic (NENA) subgroup of Neo-Aramaic. NENA is a highly diverse subgroup of over 150 dialects spoken by Christians and Jews originating from towns and villages east of the Tigris river in northern Iraq, south-eastern Turkey and western Iran. Within NENA itself, one may identify a number of subgroups on the basis of linguistic structure and lexicon.

Acknowledgement: This research was in part made possible by the generous contribution of the European Research Council, whom we thank.

Geoffrey Khan and Masoud Mohammadirad, University of Cambridge

https://doi.org/10.1515/9783111168852-005

Jewish NENA dialects are classified into two main subgroups according to their location relative to the Great Zab river. The subgroup to the west of the Zab river is spoken in the Duhok province in Northern Iraq and neighbouring regions in south-eastern Turkey. This subgroup is generally referred to as *lišana deni* ('our language').

The subgroup to the east of the Great Zab river is spoken in Iraq, north-western Iran and western Iran. This subgroup is generally referred to as trans-Zab (following Mutzafi 2008). The Jewish NENA dialect of Sanandaj (hence JSNENA) belongs to a cluster of dialects spoken by Jewish communities in various localities in the Kordestan and Kermanshah provinces in Iran in an area that includes Sainqala, Bokan, Saqqez on its northern border, Sanandaj in the centre, Bijar on the eastern border, and in the south Kerend and Qasr-e Širin (Hopkins 1999; Khan 2009; Israeli 1998). The Jewish NENA dialect of Sanandaj has been studied in detail in the grammar published by Khan (2009).

Sanandaj (Kurdish *Sine*), a town in western Iran, was home to a Jewish Aramaic-speaking community since its foundation early in the 17th Century. The town gained historical importance, especially in the 17th and 18th Centuries, during the rule of the Ardalan principality. We know that some of the Jewish communities who settled in the towns of western Iran originally lived in surrounding villages. The Jews of Sanandaj, for example, moved into the town after its foundation in the 17th Century from a village known as Qalʿat Ḥasan-ʾābād (Khan 2009, 1).

During this period JSNENA must have been in contact with Gorani (Hawrami) dialects in the region. There is also evidence that Gorani was widely spoken in Sanandaj. In 1900 the Danish linguist Åge Meyer Benedictsen made a visit to Sanandaj. In the introduction to his book 'the grammar of Hawrami of Pawa,' he gives a report about the language situation in Sanandaj. He writes that 'learned people' in the city knew and spoke *Maço* (an epithet of Gorani/Hawrami, meaning 'S/he 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 communément 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)

A more concrete account of the language shift in Sanandaj from Gorani (Hawrami) to Kurdish is found in a translation of the Bible into Hawrami Gorani by Kurdistānī (1930). The author was a famous physician from Sanandaj named Dr. Saʾeed Khan Kordestani (1863–1943). The author reports with sadness that when he returned to his hometown Sanandaj 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".[1]

There is thus little doubt that JSNENA was in contact with Gorani (Hawrami) in earlier times. This could imply that Jews were first bilingual in NENA and Gorani, and more recently, the bilingualism pattern shifted to NENA and Kurdish (Khan's informants who grew up in Sanandaj in the first half of the 20th Century did not speak Gorani).

This paper is a follow-up to Khan and Mohammadirad's book (2024) on the convergence of NENA with Iranian languages in the Sanandaj region. The authors show that JSNENA has recorded a trace of a language shift from Gorani to Kurdish. Here, we focus, in particular, on the impact of Gorani on JSNENA. Occasionally, evidence is brought from other NENA dialects spoken in the south-eastern Trans-Zab region.

The paper is organised as follows. §2 gives an overview of the main mechanisms in language contact and the terminology relating to these. §3 deals with Gorani borrowings in JSNENA. §4 concerns the pattern replication of Gorani features in JSNENA. §5 discusses the possible scenarios to accommodate both borrowing and imposition of Gorani features in JSNENA. §6 presents some features in Gorani that may have been motivated through contact with NENA. The data for the Gorani material in this paper comes primarily from the vernacular of Hawraman Takht in west Iran, generally referred to as Hawrami Takht. We use the general term 'Gorani' in place of Hawrami throughout the paper.

2 Mechanisms of language contact and language shift

Linguistic outcomes of contact-induced change lead to either language maintenance or language shift. Under the historical socio-linguistic approach to language contact in Thomason & Kaufman (1988), intensity and duration of contact are important factors in language maintenance. In this model, borrowing is associated with maintenance, and shift is associated with 'substratum interference'.

Matras and Sakel (2007b) offer a typology of mechanisms involved in contact-induced contexts involving language maintenance. The two major mechanisms are matter borrowing and pattern replication. In the former, lexical and grammatical elements (usually derivational morphemes) are borrowed from the source language (SL) into the recipient language (RL). In the latter, the RL uses its

1 see Mohammadirad (2024a) for an overview of Gorani substrate in CK Sanandaj.

own language-internal tools to match a corresponding construction in the source language through a process known as 'pivot matching'. In other words, the pattern of distribution of grammatical and semantic meaning and of formal-syntactic arrangement at various levels are modelled on the basis of the SL, which acts as a pivot for the speakers of the RL.

Van Coetsem (1988) offers a different model of language contact. In this model, the linguistic dominance relations of languages in contact play a major role in the outcomes of contact-induced change (see Winford 2005). In borrowing, lexical and grammatical elements are brought into RL by speakers for whom RL is the dominant language. In imposition, by contrast, phonological and structural features are brought into the RL by the speakers who are dominant in the SL. In bilingual situations, it is often the case that the speakers of a minority language are more linguistically dominant in the language of the socially dominant group than in their own ancestral language. This could pave the way for the imposition of phonological and structural features from the SL into RL through the agency of speakers for whom SL is linguistically dominant.

Given this background, this paper studies the impact of Gorani on JSNENA. It will be seen that features in JSNENA that originate in Gorani include both borrowing and imposition. Moreover, in some cases, JSNENA has converged with the Gorani model. We use the term 'convergence' to refer to a scalar process involving various degrees of approximation of patterns and systems of JSNENA with those of Gorani. In various places, features of JSNENA are said to 'match' features in Iranian. This reflects a process that lays the ground for convergence and replication, whereby a particular feature in Iranian is perceived to correspond to a particular feature in JSNENA. This process is equivalent to what Matras and Sakel (2007a) call 'pivot matching' in the replication of syntax or morphosyntax.

3 Matter borrowing

In this section, we enumerate borrowings of different types collectively grouped under matter replication. As will be seen, the process involves full or partial transfer of lexical and grammatical features from the SL, sometimes in phonetic form.

3.1 Loanwords

Loanwords are the most conspicuous type of borrowing. JSNENA has extensively borrowed vocabulary from Gorani. These loanwords of Gorani origin have even entered semantic domains such as body-part terminology (1) and kin terms (2), con-

stituting basic vocabulary. In the following examples corresponding CK Sanandaj lexicon are given for comparison.

(1)	JSNENA	Gorani/Kurdish
father	*tāta*	G. *tāta*; K. *bawk*
step-father	*bāwa pyāra*	G./K. *bāwa pyāra*
maternal uncle	*lāla*	G. *lāla, lālo*
paternal uncle	*māma*	G. *māmo*; K. *māma*
betrothed	*dasgīrān*	G. *dasgīrān*; K. *dazūrān* (cf. Sulemaniyya K. *dasgīran*)
grandson	*nawā-ga*[2]	K./G. *nawa*

A feature that many of the borrowed kin terms have in common is that they refer to family members who are senior from the perspective of the speaker ('father', 'step-father', 'uncle'). Kinship terms that refer to immediate family members equal in seniority[3] from the perspective of the speaker have not been replaced by borrowing in JSNENA, e.g. 'brother' (*ʾaxona*), 'sister' (*xaləsta*). The motivation for borrowing in such cases is likely to increase the formality in social interaction to express politeness. From an anthropological point of view, the expression of formality in a social situation is linked to the increased structuring of discourse that links it to norm and tradition (Irvine 1979). From a language contact point of view, this formal structuring of discourse would involve JSNENA speakers adopting the linguistic norms of the socially dominant Iranian community.

(2)	JSNENA	Gorani/Kurdish
upper arm	*qoḷa*	G. *qoḷ*
wing	*bāḷa*	G./ K. *bāḷ*
index finger	*gəlka* (pl.*gəlke*)	G. *gʊlka*; K. *kəlk*
lock (of hair)	*čīn*	G. *čīn*
armpit	*hangəḷta*	G. *hangəḷ*; Sul. K. *bənhangaḷ*
feather	*paŕa*	G. *paŕa*; K. *paŕ*; P. *par*
clitoris	*baḷūka*	G. *baloka*; K. *balūka*
penis of young boy	*guna*	G./K. *gun*

2 The *-ga* in *nawāga* is a diminutive ending originating from Iranian languages.

3 The term for grandchildren is also borrowed from Iranian, and is apparently an exception to this claim. However, grandchildren are not in the immediate family members category.

rib	*parāsū*	G./ K. *parāsū*
pupil	*gəlka ʾēna*	G. *glēna*[4]; K. *glēna-y čāw*

As can be seen, the Gorani borrowing in the domain of body part terms includes parts that show a low tendency to be borrowed cross-linguistically, e.g. 'arm,' 'wing' (see Tadmor 2009, 71, Leipzig-Jakarta list of basic vocabulary), external body parts, e.g. 'index finger,' and internal body parts, e.g. 'rib'.

Some body parts have been borrowed due to social factors such as association with emotion, cultural formality and taboo. 'Pupil' is used in the affectionate expression 'the pupil of my eye' which is equivalent to the English expression 'the apple of my eye'. The term 'penis of young boy' may have been borrowed due to its association with the ceremony of circumcision. This would be a case of the expression of linguistic formality associated with ceremonial by borrowing from the dominant Iranian culture. Taboo seems to be the factor triggering the borrowing of 'clitoris'. The borrowing of these loanwords from Gorani shows that social factors outrank linguistic inhibitions against the borrowability of body part terminology (Pattillo 2021).

Gorani borrowings of vocabulary in JSNENA extend as well to basic cultural objects:

(3)	JSNENA	Gorani/Kurdish
spoon	*čamča*	G. *čamča, čəmča*; K. *kawčək*
cushion	*sarīna*	G. *sarīna, sarəngā*; K. *sanyā*
reel, spool (for thread)	*groḷī*	G. *groḷē*
loofah	*ləfka*	G. *ləfka*
earrings	*gošwārē*	G. *gošawāra*
knife	*kārd*	K. *kārd*; G. *kārdī*
grindstone	*hāra*	G. *hāřa*, K. *hāř*
quilt	*laʿēfa*	G. *lēfa*; K. *lāf*
plate	*dawrī*	G./K. *dawrī*
fork	*čəngāḷ*	G./K. *čəngāḷ*
small pot	*gozala*	G. *gozaḷē*; K. *gozaḷa*
small pot for dry produce	*humba*	G./K. *huma*

4 One of the reviewers has suggested that the Gorani term *glēna* might be a contraction of *gəlka ʾēna* and hence a borrowing from JSNENA into Gorani. However, *gəlka* does not have a clear Aramaic/Semitic etymology, and the *-ka* may be a diminutive ending. The term *glēna* in Gorani/Kurdish could mean 'bitter-vetch' (a type of grain), and it is possible that this was sematically extended to mean 'pupil'.

clothes	*jəl*	G./K. *jəl*
bag	*torqa*	G. *toraka*; K. *tūraka*
sword	*šəmšēr*	G./K. *šəmšēr*
ceramic container	*kūzī*	G./K. *kūzī*

Words of Gorani origin have been borrowed for almost every lexical category in JSNENA, including prepositions: *mangol* 'like,' cf. literary Gorani *mangor)*; adjectives, e.g. *āmēta* 'mixed,' verbs, e.g. *p-s-n* 'to choose' cf. G. *pasnāy*, etc. (see Khan and Mohammadirad 2024: Ch. 11 for a comprehensive list).

3.2 Borrowed bound morphemes

JSNENA has borrowed a number of bound affixes from Gorani. Many of these relate broadly to discourse management. These include the definite suffix *-akē* and the additive clitic *īč*, the preverbal deontic particle *bā*, and the telicity particle *-o* (having the form *-aw* in Kurdish). The definite suffix *-akē* is invariant in NENA, and can be used in the singular and plural alike:

(4) JSNENA

kalba	'dog'	*kalbakē*	'the dog'
kalbe	'dogs'	*kalbakē*	'the dogs'

The *-akē* suffix in NENA used to be considered to be a borrowing from Kurdish (e.g. Khan 1999: 10; Coghill 2020: 510). The definite suffix in Kurdish, however, has the invariant form *-aka*, which combined with the plural suffix yields *-akān.* In Gorani, it is inflected for case and gender (see Table 1):

Table 1: The paradigm of definiteness in Gorani.

	Direct	Oblique
m.	*-aka*	*-akay*
f.	*-akē*	*-akē*
pl	*-akē*	*-akā*

In terms of phonetic shape and paradigm organization, the Gorani paradigm is a much closer match for the borrowed *-akē*. Furthermore, Khan and Mohammadirad (2024) show that in a corpus of seven spoken narratives from Gorani (Hawrami),

-akē has the highest frequency among the competing definite forms. This implies that JSNENA has borrowed the most frequent definite form of Gorani. The definite form that appears in NENA has the form *-akē* in the Trans-Zab region, e.g., J. Sulemaniyya (Khan 2004); J. Arbel (Khan 1999), reflecting that these dialects have been in contact with Gorani.

The borrowed *-akē* has generally converged with the syntax of Gorani *-akē*. Thus, in JSNENA, as in the Gorani model, it does not combine with a demonstrative (5). Also, in the structure of both languages *-akē* appears on the attribute rather than the head nouns (6):

(5) a. Gorani

ī	*žanī*	/**ī*	*žan-akē*
DEM.PROX	woman	DEM.PROX	woman-DEF.F

b. JSNENA

ʾay	baxta	/* ay	*baxtakē*
DEM.PROX	woman	DEM.PROX	woman-DEF.F

'this woman'

(6) a. Gorani

yāna	*gawra-(a)ka*
house	big-DEF

'the big house'

b. JSNENA

baxta	*rabt-akē*
woman	old-DEF

'the older wife'

However, there are some constraints in the use of *-akē* in JSNENA, not shared by the Gorani model. In Gorani, the definite suffix can be combined with a possessive suffix. In JSNENA, however, the definite suffix is not compatible with a possessive suffix:

(7) a. Gorani

kināčakē=m
girl.DEF.F=1SG

b. JSNENA

brāt-ī	/**brāt-akē-y*
daughter-1sg	

'my daughter'

While the lack of compatibility of definite suffix with the possessive suffix may be a reflection of typological difference between JSNENA and Gorani, it is more likely that borrowed definite suffix was not as integrated in JSNENA as it was in Gorani. Further support comes from the placement of the definite suffix with respect to the plural suffix, in which JSNENA and Gorani opt for opposing directionalities:

(8) JSNENA
ʾaxon-awālē 'brothers' *ʾaxon-awāl-akē* 'the brothers'

This then reflects a lesser degree of morphological integration of the loaned suffix in the composition of the word than in the SL.

JSNENA has replicated the discourse function of the Gorani definite marker. Thus, *-akē* is used in anaphoric contexts (e.g. '*A boy and a girl came in.* ***The girl*** *sat down*'.) and associative/bridging contexts (e.g. '*The room was dark and we couldn't find* ***the light switch***') in JSNENA. A case of lack of replication of function is the use of the definite suffix in a diminutive sense. This is the original meaning of the *-ak* suffix of Iranian (Haig & Mohammadirad 2019; Nourzaei 2021; Karim 2021), which has been preserved down to present-day Gorani. In the following example, the definite suffix appears on the kinship term when used vocatively. This term expresses endearment.

(9) Gorani
žan-akē 'Wife!'

NENA either uses the bare form in parallel constructions or more frequently uses inherited Aramaic diminutive suffixes to express endearment with kinship terms:

(10) JSNENA
báxta 'Wife!'
bróna 'Son!' (< *br* + diminutive *-ona*)

This confirms Weinreich's (1953, 33) observation that languages are highly resistant to borrowing bound morphology unless there is a ready function for it. It is likely, however, that the discourse management function of *-akē* was more easily transferred to JSNENA than its lexical-level function of marking the diminutive.

The Gorani additive clitic *=īč* 'too, even, even if' is highly productive in JSNENA. As in the Gorani model, the generic function of the particle is to express some kind of additive focus. The various functions can be classified broadly into those in which the focus of the particle has scope over a clause constituent and those in which it has scope over the proposition as a whole.

In JSNENA telicity distinctions of verbs are expressed by the post-verbal particle *-o*. This morpheme and its function are borrowed from Gorani (the relevant Kurdish form is *-aw*). Some examples:

(11) a. Gorani
kard=īč=š=o
do.PST=ADD=3SG:A=TELIC
'He opened it too'.
b. JSNENA
tara k-o-n-ēf-ò./
door IND-do.PRS-1SG.M:A-3SG.M:O-TELIC
'I am opening the door'.

3.3 Loan-blends

In JSNENA, loanblends are of different types. In some cases, a lexical item is transferred from Iranian, but the accompanying Iranian affix is replaced by a corresponding native JSNENA affix. In (12), NENA diminutive suffix *-ona* has replaced Iranain *-ka*.

(12)

	JSNENA	Gorani/Kurdish
breast	*mam-ona*	G./K. *mam-ka*

Loanblends can also be frequently identified in light verb constructions. Here, the non-verbal element is retained from Gorani, and the light verb is translated into NENA.

(13)

	JSNENA	Gorani
'betrothal by intermediary'	*həjbī ʾ-w-l*	*hījbī karday*

In some cases, loanblends occur in the structure of compound nouns.

(14)

	JSNENA	Iranian
grandfather (lit. big father)	*tāta ruwa*	G. *tāta gawra, bābā*; K. *bāwa gawra*
pregnant (lit. two souls)	*trē gyānē*	G. *dəva gīyāna*; K. *dū gīyān*

3.4 Phonetic matching

A phenomenon that is associated with matter borrowing is the process where an innovative form in JSNENA develops by a matching of the phonetic form of a JSNENA

word with that of a Gorani model. For example, phonetic matching takes place by the borrowing by JSNENA of an Iranian form that has the same or similar phonetic shape as the native NENA form. JSNENA, for example, has borrowed the Iranian preposition *bayn* 'between,' which replaces the phonetically similar native form *bēn*.

3.5 Borrowed phonemes

Contact with Iranian languages (Gorani and Kurdish) has led to the borrowing of some consonant phonemes in JSNENA, including */č/* [ʧʰ], */f/* [f], */j/* [ʤ], */ř/* (trilled rhotic), and */ž/* [ʒ]. These are only marginal phonemes in JSNENA and are limited to loanwords.

4 Pattern replication

This process involves the replication by JSNENA of patterns in the Iranian source language(s) without the borrowing of Iranian material.

4.1 Phonology

The phonological system of JSNENA has extensively replicated that of Gorani by matching JSNENA phonemes with Gorani (and Kurdish) phonemes. For instance, the original interdental consonants of NENA have been lost in JSNENA since they do not form part of the phonological system of Iranian languages. Similarly, the JSNENA co-ordinating particle *ū* replicates the prosody of the corresponding Iranian particle as an enclitic, which differs from historical Aramaic, in which the particle was a proclitic

JSNENA has also adopted the patterns of distribution of the Gorani phonemes. As an example, there is an innovative phonemic distinction developing within NENA that has been reinforced by matching with a parallel distinction in Gorani. In JSNENA, the phoneme that is transcribed */w/* is realised as a labio-dental [v] in most cases, e.g.

(15) JSNENA

ṣīwá [siːˈva]	'wood'
hawé́ [haˈveː]	'may he be'
hēwālé́ [heˑvaːˈleː]	'(that) he could'

This is matched by the same feature in Hawrami dialects Takht and Luhon. In these dialects of Gorani */w/* is sometimes realised as a labio-dental [v] in in the context of open unrounded vowels, e.g.

(16) Gorani

waná	[væˈnæ]	‘at’
wắt=əm	[ˈvaːt-əm]	‘I said’
āwī	[ˀaːviː]	‘water’
sāwī	[ˈsaːviː]	‘apple’

A feature of Iranian languages of the region is the intervocalic lenition of /d/, known as ‘Zagros d’ (Windfuhr 1989), e.g. CK. *bāwim* ‘almond’ (cf. Persian *bādām*). This has spread through contact to Non-Iranian languages as well, e.g. Turkic (Bulut 2018a, 413–14), and Neo-Aramaic (Khan 2018c, 386). JSNENA matches this lention of */d/*, whereby */d/* in post-vocalic position shifts to the sonoral lateral /l/. In such cases the ultimate historical origin of post-vocalic */d/* in JSNENA is a voiced interdental **ð* or an unvoiced interdental **θ*. These first developed into a */d/* and then were lenited to */l/*.

(17) JSNENA

ʾīlá	‘hand’	< **ʾīðā*
ʾēlá	‘festival’	< **ʿēðā*
hol	‘he does’	< **ʿāwəð*
mālá	‘village’	< **māθā*
belá	‘house’	< **bayθā*
mīlá	‘dead’	< **mīθa*

The lenition of /d/ in the Kurdish dialects of the regions results typically in a semi-vowel /w/, e.g. *pāwšā* ‘king’ (cf. Pers. *pādšā*); *āwəm* ‘human’ (cf. Pers. *ādam*). A closer match with JSNENA, however, comes from the Hawrami dialects of Gorani where intervocalic and postvocalic /d/ are realised as an alveolar approximant [ɹ] represented as <đ>, and sometimes as a lateral /l/ (especially in Gorani Hawrami dialects outside of Hawraman, see Mahmoudveysi & Bailey 2018: 541).

(18) Gorani

xuđắ	[xuˈɹaː], [xuḷā]	‘God’	cf. Pers. *xodā*
ʾắđa	[ˈʔaːɹæ]	‘she (3sg.f direct)’	
ʾāđ	[ˈʔaːɹ]	‘he (3sg.m direct)’	

Therefore, lenition of /d/ in JSNENA exhibits closer matching with Gorani than with Kurdish, since in both the main outcome is a sonorant consonant. This is reminiscent of a process in contact phonology described by Blevins (2017) as the 'perceptual magnet effect', whereby speakers of a language match a sound in their L1 with a sound that is perceived to be similar, even if not objectively identical.

4.2 Morphology

JSNENA has replicated many Iranian morphosyntactic patterns. In most cases, morphosyntactic pattern replication results only in partial convergence rather than complete replication. We shall present some cases of replication here.

4.2.1 Morphology of nouns

Both Gorani and JSNENA mark grammatical gender on nouns, where the gender assignment system is primarily morpho-phonological. Thus, nouns are assigned gender on the basis of the endings they take. In JSNENA, nouns of Aramaic stock that end in the feminine marker *-ta* or its phonetic variants are feminine, and most words that end in *-a* are masculine, e.g. *lēš-a* (m) 'dough'; *gup-ta* (f) 'cheese'.

In Gorani Hawrami, masculine nouns end in a consonant, and stressed *-á, -ī́, -ó, -ū́*. A subset of nouns ending in *-ā́* are likewise masculine. By contrast, nouns ending in unstressed *-ī*, unstressed *-a* and stressed *-é* are feminine. Examples: *varg* (m) 'wolf'; *čamčá* (m) 'spoon'; *məzgī́* (m) 'mosque'; *gałā́* (m) 'leaf'; *máya* (f) 'sheep'; *nāmé* (f) 'name'; *hā́rdī* (f) 'flour'.

Gorani loanwords in NENA are generally borrowed together with their gender. In some cases, Gorani loanwords in JSNENA have a slightly different phonological shape, but they have, nevertheless, preserved the Gorani gender. This reflects a high level of bilingualism in Gorani among JSNENA speakers.

(19)

	JSNENA	Gorani
'language'	*zwān* (m)	*zwān* (m)
'spoon'	*čamča* (m)	G. *čamča, čəmča* (m)
'plate'	*dawrī́* (m)	*dawrī́* (m)
'fruit'	*mēwá* (m)	*mēwá* (m)
'chair'	*sandalī́* (f)	*sandalī́a* (f)
'pillow, cushion'	*sarīná* (f)	*sarīna* (f)/*sərangā́* (f)
'frog'	*qurbāqá* (f)	*qurwā́qī* (f)

A feature common to conservative dialects of Gorani and JSNENA is that numerals above one are combined with plural nouns in both languages, whereas Kurdish lacks this feature.

(20) JSNENA
yāla trèsar šənē,| *xamsar šənē dòq-wā-lē.*|
boy twelve years fifteen years hold.PRS.3SG.M:A-PSTC-OBL.3SG.M:O
'A boy twelve years old (and one) fifteen years old would observe it (the fast)'.

(21) Gorani
pànj řo-ē hurpř-ēn-mē.|
five day-PL.DIR dance.PRS-PSTC-1PL:S
'We would dance for five days'.

(22) Kurdish
haft kanìšk a-w-ən.|
seven girl IND-be.PRS-3PL:S
'They were seven girls'.

The existence of plural marking with numerals above 'one' helped preserve in JSNENA the pattern that was inherited from earlier Aramaic. This is then a case of constraint on a change inhibited by contact if the contact language shares the same feature. Similarly, Khan (2020) reports that in NENA dialects in contact with Arabic, interdental consonants */θ/* and */ð/* have been preserved due to their presence in Arabic. Dickey (2011) uses the term 'replica preservation' in discussing the conservative influence of German on the Western Slavic verbal system.

4.2.2 Morphology of pronouns

In JSNENA, an innovative oblique case inflection has developed in the third-person pronouns, which is historically derived from the fusion of the oblique particle *d* + pronoun, see (23). This matches the oblique case inflection of third-person Gorani pronouns (24). Note that the Kurdish of Sanandaj has lost case inflection and could not have been a model for JSNENA.

(23) JSNENA

	Direct	Oblique
3SG	*ʾo*	*do*
3PL	*ʾoni*	*doni*

(24)

	Gorani		Kurdish
	Direct	Oblique	
3SG.M	*āđ*	*āđī*	*aw*
3SG.F	*āđa*	*āđē*	
3PL	*āđē*	*āđīšā*	*awān*

Similarly, deixis pronouns in JSNENA are inflected for case following the Gorani model. Examples are from near deixis pronouns.

(25) JSNENA

	Direct	Oblique
SG	*ʾay,*	*day,*
	ʾē	*dē*
PL	*ʾaynī, ʾənyē*	*daynī, dənyē*

(26) Gorani

	Direct	Oblique
SG.M	*īna*	*īnay*
SG.F	*īnē*	*īnē*
PL	*īnē*	*īnā, īnīšā*

4.2.3 Morphology of verbs

In JSNENA verbs inflect for TAM by root and pattern morphology. Discontinuous lexical roots consisting of three, or in some cases four, consonants are mapped onto discontinuous morphological patterns of vowels and consonants, e.g.

(27) JSNENA
root *g-r-š* 'to pull' + present pattern *CaCəC* > *garəš*
root *s-m-x* 'to stand' + past intransitive pattern *CCiC* > *smīx*

In addition to the basic pattern of TAM inflection, referred to as Form I, the verbal system has derivational patterns, referred to as From II and Form III, the main function of which is to increase the valency of the verb.

A distinctive feature of JSNENA verbal morphology is the use of different past stems and resultative participles for transitive agentive verbs, on the one hand, and intransitive unaccusative or passive verbs on the other. Thus in the following stems the morphology of passive and intransitive stems is identical, in contrast to the morphology of agentive stems.

Form I

(28) *g-r-š* 'to pull' (tr.), *s-m-x* 'to stand' (intr.)

	Agentive	Intransitive unaccusative	passive
Past stem	*grəš-*	*smīx-*	*grīš-*
Resultative participle	*gərša*	*smīxa*	*grīša*

Form III

(29) *m-ršx* 'to cause to walk' (tr.), *m-skr* 'to become lost' (intr.)

	Agentive	Intransitive unaccusative	passive
Past stem	*mərxəš-*	*məskīr-*	*mərxīš-*
Resultative participle	*mərxša*	*məskīra*	*mərxīša*

This innovation in the morphology of verb stems in JSNENA is triggered by Gorani, in which the passive morpheme (PRS. *-īa*, pst *-īā*, e.g. *kušīa* 'is killed,' *kušīā* 'was killed') is also used in the stem of some intransitive verbs.

(30) Gorani

agentive *wātay* 'to say'; intransitive unaccusative verb *mařīāy* 'to break'

	Active transitive	Passive	Intransitive
Present stem	*wāč*	*wāč**īa***	*mař**īa***
Past stem	*wāt*	*wāč**īā***	*mař**īā***
Participle	*wāta*		*mařīā(a)*
Infinitive	*wātay*		*mařīāy*

This morphological alignment of passive and intransitive unaccusative morphology corresponds to the alignment of past stems in JSNENA, whereby the same pattern is used for passive and intransitive unaccusative verbs

Another innovation in the morphology of verb stems in JSNENA is that the causative inflection pattern of verbs in Form III has been extended to the pattern of agentive verbs in Form I, as seen above in vocalic patterns of Form I and Form III in (28)-(29).

We shall now consider the possible Iranian background of this extension in JSNENA. In Gorani (and in Kurdish), the valency of verbs is increased by adding a causative affix *-n* to the intransitive stem, e.g. *ēšāy* 'to hurt': int.prs. *ēš-*, int.pst *ēšā-*; caus.prs. *ēš-n-*, caus.pst. *ēš-n-ā-*.

It is significant that the Iranian causative morphemes in Gorani and Kurdish are also used in agentive intransitive verbs expressing the emission of sound, i.e. unergative verbs. This indicates that the suffixes may also mark agentivity without the increase in valency that is characteristic of causative:

(31) Gorani
*qēř**n**āy* ‘to shout’
*qīž**n**āy* ‘to scream’
*qūl**n**ā=š* ‘it crowed’
*hīl**n**ā=š* ‘it neighed’

This extension of a causative morphology to the marking of agentive irrespective of valency is matched by the JSNENA agentive patterns in the past stem and participle. This convergence between JSNENA and Gorani is, therefore, a case of the replication of a grammatical category but not its exponence, i.e. the manner of expressing it, which is a recognised phenomenon in language contact studies (Hickey 2010: 11).

Another area of convergence is the indexation of core arguments in the periphery of verbs. JSNENA replicates the Gorani pattern of expressing pronominal objects ergatively by direct verbal person affixes, except for the fact that in JSNENA the object expressed by the direct verbal person suffixes is mostly restricted to 3rd person.[5]

(32) JSNENA
a. *gərš-á́-lē*
pull.PST-3SG.F:O-3SG.M:A
‘He pulled her’.
b. *gərš-ī́-lē*
pull.PST-3PL:O-3SG.M:A
‘He pulled them’.

(33) Gorani[6]
a. *ārd-ē=š*
bring.PST-3PL:O=3SG:A
‘S/he brought them’.
b. *ārd-īmē=š*
bring.PST-1PL:O=3SG:A
‘S/he brought us’.

Another area of convergence is the formation of perfect constructions. In JSNENA, the realis resultative perfect is expressed by a compound construction consisting of the resultative participle combined with the present enclitic copula, e.g. *smīxá=y*

5 This is widespread but not universal feature in NENA dialects, see Coghill (2016); Khan (2017); and Noorlander (2021).
6 see Öpengin & Mohammadirad (2022) for an overview of patterns of argument indexing across Kurdish.

[stand_up.PST.PTCP.M=3SG:S] ‘He has stood up’. The participle is inflected for gender and number (e.g. ‘stand up’ sg.m *smīxa*, sg.f *smīxta*, pl *smīxe*).

With transitive active resultative participles, this perfect construction is only available where the agent of the transitive action is third person. The participle and the copula cliticised to it do not agree with this agent but rather with the undergoer of the action, analogously to the inflection of the transitive past stem with direct suffixes. However, unlike the construction with the transitive past stem, in which the agent is marked by L-suffixes, the agent in the resultative-perfect construction is not marked.

(34) JSNENA
  a. *grəštē=ya*
     pull.PST.PTCP-3SG.F=COP.3SG.F:O
     ‘he/she/they has/have pulled her’
  b. *gəršē=n*
     pull.PST.PTCP.3PL=COP.3PL:O
     ‘he/she/they has/have pulled them’

The formation of the perfect in JSNENA, and other NENA dialects, by a construction consisting of a resultative participle and a copula is an innovation under the influence of Iranian languages. The perfect in Gorani is formed by combining the resultative participle with the copula. The resultative participle inflects for gender and number, e.g. ‘to sleep’ SG.M *wəta,* SG.F, *wətē*, PL. *wətē*. As in JSNENA, the perfect constructions in Gorani are characterised by the agreement of both the participle and the copula with the intransitive subject and the transitive object, i.e. the perfect aligns ergatively. However, unlike JSNENA, it is not limited to the third person.

(35) Gorani
  a. *wətē=na*
     sleep.PST.PCTP.3SG.F=COP.3SG.F:S
     ‘She has slept’.
  b. *dīē=nī=šā*
     see.PST.PCTP.F=COP.2SG.F:O=3PL:A
     ‘They have seen you (f)’
  c. *dīē=nmē=šā*
     see.PST.PCTP.PL=COP.1PL:O=3PL:A
     ‘They have seen us (f)’

In many NENA dialects, there is only partial convergence with the Iranian model (Khan 2020). In most NENA dialects that form the perfect with a participle, for example, its alignment in transitive clauses is not ergative but accusative, in contrast to the Iranian model in the various regions. In JSNENA, the convergence is greater in this respect since the alignment of transitive perfect constructions is ergative. It does not, however, replicate all details of the Gorani model.

4.3 Syntax

JSNENA matches the Iranian languages of the Sanandaj region in having the SOV as the default word order.[7] In JSNENA, the placement of the object after the verb is sometimes used to give prominence to an indefinite noun with a newly introduced referent that plays a role in the ensuing discourse. This is matched by (37) from Gorani.

(36) JSNENA

rasm	*dè=ē-lē*|	*ʾafsarè*|	*ʾartèš*|	*rakw-ī-wa*
custom	OBL.this=COP.PST-OBL.3SG.M:S	officers	army	ride.PRS-3PL:S-PSTC

sūsì.\|
horse
'It was the custom that officers in the army would ride on a horse'. (A:15)

(37) Gorani

āđ-īč	*Ø-čəř-o*	***Alī***	***Ašraf***	***xàn***	***ū***	***Yāwar***	***jafar***
3SG.DIR.M	IND-call.PRS-3SG:A	PN	PN	khan	and	PN	PN

xàn-ī.|	*sarlaškar-è*	*b-ēn-ē.*|
khan-OBL.M	major.general-PL.DIR	be.PRS-PSTC-3PL:S

'He summons Ali Ashraf Khan and Yawar Jafar Khan. They were major generals'.

Another area of convergence is differential object marking. In Gorani, an object of a present-stem verb is in the oblique case when it is human or it is non-human but has the definite article suffix *-aka* (see 38.a) or alternatively when the nominal is definite but is not marked with *-aka* (38.b). Indefinite direct objects generally do not have case marking (38.c):

7 Relatedly, nominal addressees and recipients tend to overwhelmingly occur post-verbally in both languages, an instantiation of constructional calquing or 'metatypy' in terms of Ross (2019). See Mohammadirad (2024b) for an overview of the word order profile of Kurdic dialects in Sanandaj region.

(38) Gorani

a. ***har-aka-y*** *Ø-wəz-o* *tawèḷa-(a)ka=w*|
donkey-DEF-OBL.M IND-put.PRS-3SG:A stable-DEF=and
'He puts the donkey in the stable'.

b. ***lāla*** ***Hasan-ī*** *mə-žnās-ù̀,*| ***Rahmān-ī*** *mə-žnās-ù̀.*|
uncle PN-OBL.M IND-know.PRS-1SG:A PN-OBL.M IND-know.PRS-1SG:A
'I know uncle Hasan, I know Rahman'.

c. ***zamāwəna=š*** *pē* *Ø-gēr-òn.*|
wedding=3SG:R for IND-take.PRS-3SG:A
'He throws a wedding ceremony for her'.

This oblique marking of the object is replicated in JSNENA by the oblique prefixed particle *həl-*. In JSNENA, however, only human objects have this oblique marking, see (39.a). As in Gorani, indefinite direct objects are not flagged (39.b).

(39) JSNENA

a. *ʾay-bronà*| ***həl-day*** ***brāta*** *g-bè.*|
this-boy OBL-this girl IND-love.PRS.3SG.M:A
'The boy loves the girl'.

b. *šamaš=ē* *knīštà*| *g-ēzəl-wa* ***sūsì***
beadle=EZ synagogue IND-go.PRS.3SG.M:S-PSTC horse
k-mē-wa.|
IND-bring.PRS.3SG.M:A-PSTC
'The beadle of the synagogue went to fetch a horse'. (A:43)

This can be regarded as another example of how JSNENA has replicated the general principle of an Iranian morphosyntactic pattern but has applied a slightly different distribution of this feature internally.

Another case of partial replication is the expression of progressive. In JSNENA, the progressive is formed by placing the infinitive before a realis present stem form of the same verb. This construction replicates the Gorani pattern of constructing progressives (41).

(40) JSNENA

k-xolē *k-əx-na*
IND-eat.INF IND-eat.PRS-1SG.M:A
'I am eating'

(41) Gorani
mə-l-āy *mə-l-ū*
IND-go-ADV IND-go.PRS-1SG:S
'I am going'

It is notable that in Gorani, the inflected realis form is preceded by a form composed of the present stem and the ending *-āy*. This is not the same form as the infinitive, but its ending resembles that of infinitives, which usually end in *-ay* (and much less frequently in *-āy*). This can be identified, therefore, as a case of imperfect matching in that the Iranian form has been matched with the inherited JSNENA infinitive in the progressive construction.

In JSNENA, the subject nominal in a copula clause is occasionally placed after the predicate–copula resulting in the order *predicate—copula—subject*. The postposed subject has a referent that has been evoked previously (see 42). This feature exhibits matching with both the form and function of an Iranian construction (43).

(42) *xa* provèrb=*yē-lē* ***ʾēa***.|
one proverb=COP.PST-OBL.3SG.M:S this
'This was a proverb'. (B:65)

(43) *mamnòʿa* *bī* ***qəsa*** ***karđ-ay.***|
forbidden COP.PST.3SG:S talk do.PST-INF
'Speaking was forbidden'.

5 Scenarios for contact-induced change originating from Gorani

We have seen throughout the paper that features in JSNENA that originated in Gorani include both borrowing (see §3) and imposition (see §4). As noted, borrowing and imposition involve inverse agentivity relations on the part of RL and SL. In borrowing, RL is the linguistically dominant language for the RL speakers. Here both languages are maintained, and what is imported is typically lexical items and less frequently derivational morphology. Imposition, by contrast, occurs in two situations, the first of which concerns a language shift by speakers, whereby speakers of the language that is for them linguistically dominant (i.e. the SL) acquire through imperfect learning a second language (i.e. the RL), which is less dominant. The dominant SL in such situations is termed the substrate language, and the less dominant RL is the superstrate language. Imposition may occur through the agency

of a linguistically dominant language in a bilingual situation where this dominant language is not a substrate in a language shift to a less dominant language. This is typically the case where the RL is a maintained ancestral language of a small community, and the dominant SL that has the agentivity is an external language of the wider society that exerts cultural pressure on the smaller community.

If, as remarked, borrowing and imposition involve inverse agentivity relations on the part of RL and SL, how is it possible that we can identify both Gorani borrowings and imposition features in JSNENA. Some scenarios suggest themselves.

A first model would be to take historical layers of contact into account. It is significant that the majority of Iranian loanwords in JSNENA are from Gorani rather than Kurdish. This would mean that most of the lexical borrowing took place at an earlier historical period, before the shift to Kurdish in the population of the region at the end of the nineteenth Century. If the NENA dialects of the region were on a trajectory of language shift to Iranian, this would have involved a shift in dominance in the languages of bilinguals. It can be hypothesised that at an earlier period, the bilingual NENA-speaking communities were NENA-dominant, which gave rise to borrowing vocabulary from Gorani. As we have discussed (§3.1), there is often a functional motivation for the borrowing of basic vocabulary in JSNENA, e.g. the expression of formality in the naming of senior members of the family or the association of words with emotion. This selection of loanwords for the sake of lexical enrichment would seem to be a feature of RL agentivity. At a later period, the linguistic dominance of NENA would have given ground to the dominance of Iranian. As a consequence, imposition of Iranian features would have taken place through SL agentivity. As we have seen, many of the syntactic and morphosyntactic patterns that were imposed on JSNENA were specifically those of Gorani, which suggests that this process of Iranian-dominant SL agentivity had begun while Gorani was still widely spoken in the region.

Another possible scenario would be the diffusion of Gorani features into JSNENA through the bilingualism of Gorani speakers in NENA. Before the foundation of the town of Sanandaj, the Jews in the region lived in small villages. They may have had Gorani-speaking Muslim neighbours in the same village. In such small village communities, it is possible that the Gorani-speakers learnt some of the NENA of their Jewish neighbours. If the Gorani-speaking inhabitants in the villages learnt NENA, this is likely to have been imperfect learning, which would have resulted in the imposition of features from the linguistically dominant Gorani language. This could have resulted in the diffusion of Gorani's syntactic and phonological features into JSNENA.

6 The convergence of Gorani with NENA

As remarked, the deep extent of Gorani's influence on JSNENA reflects a long period of contact between the two languages. In fact, the direction of this influence may not have been only from Gorani to JSNENA. This applies, for example, to the Gorani past converter suffix on present-stem verbs, which expresses past imperfective.[8]

(44) Gorani
vraš-én-ī
sell.PRS-PSTC-2SG:A
'You used to sell/ were selling'.

(45) JSNENA
garš-í-wa
pull.PRS-3PL:A-PSTC
'They used to pull/ were pulling'.

The expression of the progressive with a constituent resembling an infinitive preposed before the verb is a further feature that resembles JSNENA (see ex. 40–41). Another possible candidate is the Gorani plural ending *-ē* on nouns in the direct case and adjectives in the direct case.[9] Interestingly, this is identical phonetically to the NENA plural ending *-ē*. It could be the case that the NENA plural suffix *-ē* reinforced the inherited Gorani plural direct marker.

Similarly, in JSNENA and Gorani, direct object clitics in present tense constructions follow the subject person suffixes. This is an inherited feature in JSNENA, but it is not clear that it is inherited in Gorani:

(46) Gorani
mə-sān-ū=š
IND-buy.PRS-1SG:A=3SG:O
'I (will) buy it'.

8 This feature is additionally only attested in Taleshi among West Iranian languages. The Gorani convertor suffix *-ēn* is claimed to derive from earlier optative endings *-ē/-ēn (Windfuhr 1995).
9 This plural ending is also attested in some Tatic dialects, e.g. Vafsi, Khoini (see Stilo 2008), spoken far from the mountainous Gorani heartland.

(47) NENA
garš-ētu-lē
pull.PRS-2PL:A-3SG:O
'You pull him'.

The Gorani constructions could be explained as inner Iranian developments, but their existence in Gorani could have been induced or at least reinforced by contact with NENA, causing Gorani to differ from developments in other Western Iranian languages. Indeed, a number of loanwords from NENA can be identified in Gorani, e.g. *šarmgā* 'pubis' <NENA *šərma* 'fundament'. If the hypothesis that NENA had an impact on the structure of Gorani is correct, then the most likely explanation would be that there was a language shift of many NENA-speakers to Gorani at some period.

Abbreviations

A	transitive subject
ADD	additive
ADV	adverbial
CLF	classifier
COP	copula
CP	complex predicate
DEF	definite
DEM	demonstrative
DIM	dimunitive
DIR	direct
DRCT	directional
EP	epenthesis
IMP	imperative
IND	indicative
INDF	indefinite
IPFV	imperfective
O	object
OBL	oblique
PERF	perfect
PL	plural
POST	postposition
PP	prepositional phrase
PROX	proximative
PRS	present
PRSNT	presentative
PST	past
PSTC	past convertor formative

PTCL	particle
PTCP	participle
R	Adposition complement
Ar.	Arabic
Av.	Avestan
Bah.	Bahdini Northern Kurdish
CK	Central Kurdish
K.	Kurdish
MP.	Middle Persian
NK	Northern Kurdish
Pth	Parthian
S	Intransitive subject
SK	Southern Kurdish
YA.	Young Avestan.

References

Blevins, Juliette. 2017. Areal Sound Patterns: From Perceptual Magnets to Stone Soup. In Raymond Hickey (ed.), *The Cambridge Handbook of Areal Linguistics*, 88–121. (Cambridge Handbooks in Language and Linguistics). Cambridge: Cambridge University Press. https://doi.org/10.1017/9781107279872.006.

Bulut, Christiane. 2018. The Turkic varieties of Iran. In Geoffrey Haig & Geoffrey Khan (eds.), *The Languages and Linguistics of Western Asia: An Areal Perspective*, 398–444. Berlin/Boston: De Gruyter Mouton.

Christensen, Arthur & Åge Meyer Benedictsen. 1921. *Les dialectes d'Awroman et de Pawa*. Kobenhavn: B. Lunos.

Coghill, Eleanor. 2020. Northeastern Neo-Aramaic and Language Contact. In Anthony P. Grant (ed.), *The Oxford Handbook of Language Contact*, 494–518. Oxford: Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199945092.013.19.

Dickey, Stephen M. 2011. The varying role of po- in the grammaticalization of Slavic aspectual systems: sequences of events, delimitatives, and German language contact. *Journal of Slavic Linguistics* 19(2). 200–231.

Haig, Geoffrey. 2018. The Iranian languages of northern Iraq. In Geoffrey Haig & Geoffrey Khan (eds.), *The Languages and Linguistics of Western Asia: An Areal Perspective*, 267–304. (The World of Linguistics 6). Berlin/Boston: De Gruyter Mouton.

Haig, Geoffrey & Masoud Mohammadirad. 2019. Definiteness in Central Kurdish: sources and outcomes. Presented at the Presented at the 4th International Conference on Kurdish Linguistics, University of Rouen, France.

Hickey, Raymond. 2010. Language Contact: Reconsideration and Reassessment. In Raymond Hickey (ed.), *Handbook of Language Contact*, 1–28. Chichester: Wiley-Blackwell.

Hopkins, Simon. 1999. The Neo-Aramaic Dialects of Iran. In Shaul Shaked & Amnon Netzer (eds.), *Irano-Judaica IV*, 311–327. Jerusalem: Magnes.

Irvine, Judith T. 1979. Formality and Informality in Communicative Events. *American Anthropologist* 81. 773–790.

Israeli, Yaffa. 1998. *Ha-Aramit Ha-Ḥadashah Shebe-Fi Yehude Saḳiz (derom Kurdisṭan)*. [Israel: ḥ. mo. l.

Karim, Shuan Osman. 2021. *The synchrony and diachrony of New Western Iranian nominal morphosyntax*. Ohio: The Ohio State University dissertation. http://rave.ohiolink.edu/etdc/view?acc_num=osu1638313342357598.

Khan, Geoffrey. 1999. *A Grammar of Neo-Aramaic: The Dialect of the Jews of Arbel*. Boston, MA: Brill.

Khan, Geoffrey. 2004. *The Jewish Neo-Aramaic Dialect of Sulemaniyya and Ḥalabja.* (Studies in Semitic Languages and Linguistics 44). Leiden: Brill.

Khan, Geoffrey. 2009. *The Jewish Neo-Aramaic Dialect of Sanandaj*. Piscataway, NJ: Gorgias Press.

Khan, Geoffrey. 2018. Western Iran: overview. In Geoffrey Haig & Geoffrey Khan (eds.), *The Languages and Linguistics of Western Asia: An Areal Perspective*, 385–397. (The World of Linguistics 6). Berlin/Boston: De Gruyter Mouton.

Khan, Geoffrey. 2020. Contact and Change in Neo-Aramaic Dialects. In Bridget Drinka (ed.), *Historical Linguistics 2017*, 391–411. Amsterdam: Benjamins.

Khan, Geoffrey. 2020a. Contact and change in Neo-Aramaic dialects. In Bridget Drinka (ed.), *Historical Linguistics 2017: Selected papers from the 23rd International Conference on Historical Linguistics, San Antonio, Texas, 31 July – 4 August 2017* (Current Issues in Linguistic Theory), 387–408. Amsterdam: John Benjamins Publishing Company. https://doi.org/10.1075/cilt.350.18kha.

Khan, Geoffrey & Masoud Mohammadirad. 2023. *Language contact in Sanandaj: A study of the impact of Iranian on Neo-Aramaic*. Berlin/Boston: De Gruyter Mouton. https://doi.org/10.0000/9783111209180.

Kurdistānī, Saʿīd Khān. 1930. *Mizgānī (Nazānī)*. Tehran:.

Mahmoudveysi, Parvin & Denise Bailey. 2018. Hawrāmī of western Iran. In Geoffrey Haig & Geoffrey Khan (eds.), *The Languages and Linguistics of Western Asia: An Areal Perspective*, 533–568. Berlin/Boston: De Gruyter Mouton.

Matras, Yaron & Jeanette Sakel. 2007a. Investigating the mechanisms of pattern replication in language convergence. *Studies in Language* 31(4). 829–865.

Matras, Yaron & Jeanette Sakel. 2007b. Investigating the mechanisms of pattern replication in language convergence: *Studies in Language*. John Benjamins Publishing Company 31(4). 829–865. https://doi.org/10.1075/sl.31.4.05mat.

Mohammadirad, Masoud. 2024a. Gorani substrate within Kurdish: Evidence from Southern dialects of Central Kurdish. *Journal of Historical Linguistics*. doi.org/10.1075/jhl.23001.moh

Masoud Mohammadirad. 2024b. Zagros region: The Kurdish-Gorani continuum. 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*, 235–268. Berlin: Language Science Press.

Mutzafi, Hezy. 2008. Trans-Zab Jewish Neo-Aramaic. *Bulletin of SOAS* 71(3). 409–431.

Nourzaei, Maryam. 2021. Definiteness Marking from Evaluative Morphology in Balochi: Internal Variation and Diachronic Pathway. *Iranian Studies* 54(5–6). 699–735. https://doi.org/10.1080/00210862.2020.1813555.

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. https://doi.org/10.1007/978-3-030-78837-7_5.

Pattillo, Kelsie. 2021. On the Borrowability of Body Parts. *Journal of Language Contact* 14(2). 369–402. https://doi.org/10.1163/19552629-14020005.

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. https://doi.org/10.1093/oxfordhb/9780199945092.013.5.

Stilo, Donald. 2008. Case In Iranian: From Reduction and Loss to Innovation and Renewal. In Andrej L. Malchukov & Andrew Spencer (eds.), *The Oxford Handbook of Case*, 700–715. Oxford: Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199206476.013.0049.

Tadmor, Uri. 2009. Loanwords in the world's languages: Findings and results. In Martin Haspelmath & Uri Tadmor (eds.), *Loanwords in the world's languages: a comparative handbook*, 55–75. Berlin/New York: De Gruyter Mouton.

Thomason, Sarah Grey & Terrence Kaufman. 1988. *Language contact, creolization, and genetic linguistics*. Berkeley: Univ. of California Press.

Van Coetsem, Frans. 1988. *Loan Phonology and the Two Transfer Types in Language Contact*. Dordrecht: Foris.

Weinreich, Uriel. 1953. *Languages in contact: findings and problems. – Cambridge University*. New York: Linguistic Circle of New York. https://cambridge-primo.hosted.exlibrisgroup.com. (23 July, 2022).

Windfuhr, Gernot. 1995. Dialectology. *Encyclopædia Iranica*. https://iranicaonline.org. (21 March, 2023).

Windfuhr, Gernot. 1989. New West Iranian. In Rüdiger Schmitt (ed.), *Compendium Linguarum Iranicarum*, 251–262. Wiesbaden: Reichert Verlag.

Winford, Donald. 2005. Contact-induced changes: Classification and processes: *Diachronica*. John Benjamins Publishing Company 22(2). 373–427. https://doi.org/10.1075/dia.22.2.05win.