

## BORROWED ADJECTIVAL INFLECTION IN THE NORTH-EASTERN NEO-ARAMAIC DIALECTS

ELEANOR COGHILL

UPPSALA UNIVERSITY

### Abstract

Many North-Eastern Neo-Aramaic (NENA) dialects have an inflectional paradigm (MSG *-a*, FSG *-e*, CPL *-e*) restricted to a particular set of adjectives. These are usually loans belonging to the semantic fields of bodily characteristics and colours. While most of the words taking the inflection across NENA are borrowed from Kurdish, there is strong evidence that the non-inherited inflection (FSG *-e*) is borrowed from Arabic. While the inflection is not, in Arabic, found on adjectives of the class denoting these semantic fields, a motivation for adopting it could be that it enables a distinction between the MSG and FSG forms that might otherwise be lost. The inflection could have originated in dialects in closer contact with Arabic, before spreading to other dialects and being applied to loans of other origins. A possible motivation as to why a loan inflection *-e* was used for FSG may be the preservation of the syllable structure of loans.

### 1. Introduction<sup>1</sup>

North-Eastern Neo-Aramaic dialects (henceforth NENA) are a group of related but diverse language varieties indigenous to a region spanning northern Iraq, south-eastern Turkey, north-western Iran and north-eastern Syria. Their closest living relative is Ṭuroyo, spoken in

<sup>1</sup> I would like to express my deep gratitude to Ghazwan Khundy, Bahnam Sakat, Stella Shadabi, George Orah, Dana Amanj Najeeb and Amal Marogi, for additional data on the NENA dialects they speak; to Edy Touma, Ablahad Lahdo, Shmoni Hawil Younan, Awin Gorgis and Ferhad Shakely for putting me in contact with speakers of the languages under discussion; to Kawther Askar, Steven Fassberg, Nikita Kuzin, Veana Al-Saka, Shabo Talay, and Jan Beṭ-Şawoçe for kindly answering my questions on Neo-Aramaic dialects they research and/or speak themselves; to Mowafak Nisko for helping me with Arabic dialects of the region; to Newzad Hirori for help with Northern Kurdish. I also thank the editor and anonymous reviewers for their constructive advice. This investigation developed out of my recent research on the North-Eastern Neo-Aramaic dialect of Telkepe, which was generously funded by Riksbankens Jubileumsfond.

a neighbouring area of south-eastern Turkey on the west side of the Tigris. Their closest ancient relatives are Classical Syriac (which emerged further to the west) and Babylonian varieties (Jewish Babylonian Aramaic and Classical Mandaic), which originated further to the south.

The dialects are or were spoken by Christian and Jewish minorities in a region which numerically and politically has long been dominated by Kurds speaking mainly Northern Kurdish (Kurmanji and Bahdini) and Sorani (Central Kurdish). A number of vernacular Arabic varieties of the Qəltu type (Talay, 2011; Blanc, 1964; Jastrow, 1978) are or were historically spoken across the region, mainly by Jews, Christians and other religious minorities. Qəltu dialects are also spoken in nearby Mosul and further south, by Muslims as well as religious minorities. Speakers of Turkic varieties are also to be found in the region: Turkman communities in Iraq, speaking Iraq-Turkman (Bulut, 2018) and Azeris in north-western Iran, speaking Iranian Azeri. Under Ottoman rule there was also some contact with Turkish through the administration. In the last couple of hundred years, speakers of NENA, like others in the region, came into contact with speakers of French and English, whether missionaries, or rulers and administrators.

NENA speakers are today bi- or multi-lingual. It is documented that this was also the case historically, especially with regard to local Kurdish varieties (Coghill, 2020, 498–500). Speakers of the other regional languages were naturally also in contact with each other and mutual influence is visible across the regional varieties of Kurdish, Arabic and Turkic (see, e.g. Akkuş, 2020; Öpengin, 2020; Bulut 2018). It can sometimes be hard to establish whether any given loan comes directly from the source language or indirectly via another language which has borrowed it.

Common to many NENA dialects is a particular inflectional paradigm found almost exclusively with borrowed adjectives referring to colours and bodily characteristics of humans and animals. In this paradigm, the masculine and plural endings are the same as for inherited adjectives (\*-a and \*-e respectively), but the feminine ending, instead of being the usual \*-ta or \*-θa, is \*-e,<sup>2</sup> that is, it is identical to the plural inflection.

The origin of this inflectional paradigm or, more precisely, of the feminine inflection, is not quite straightforward. The adjectives inflecting this way in the different dialects have a variety of origins, although predominantly Northern Kurdish (NKurd) and vernacular Arabic

<sup>2</sup> The precise endings can vary somewhat from dialect to dialect, due to sound changes, but they are all reflexes of the above forms.

(Arab), and there is no exact parallel in the donor languages, in terms of form and lexical distribution, that could have been copied directly. In the literature, Kurdish has been suggested as the origin and Kurdish is indeed the origin of most loans in NENA, but there are some problems with this hypothesis, when one looks more closely.

The main questions to be addressed in this paper are: What is the origin of this inflection? Why is it found with loan adjectives referring to colours and bodily characteristics? What was the motivation for its borrowing?

## 2. Adjectival inflection in NENA<sup>3</sup>

Universally across documented NENA dialects, most adjectives have a three-way inflection: masculine singular (MSG), feminine singular (FSG) and common plural (CPL). The earlier Aramaic gender distinction in the plural (MPL, FPL) is no longer found with adjectives in these varieties (except when they are used as nouns).<sup>4</sup> Adjective normally inflect. When the adjective is in attributive position it agrees with the head of the phrase; when it is in predicative position it agrees with the subject of the clause. There are small differences in the realization of the inflectional affixes, due to sound changes, but they are all reflexes of MSG \*-a, FSG \*-ta or \*-θa (depending on the historical phonology of the stem), and CPL \*-e. For instance, in Alqosh (Coghill, 2004, 275–76), the inflections are MSG -a, FSG -ta ~ -θa, CPL -ə. Two examples of adjectives with these inflections are:

MSG *kpina*, FSG *kpanta*, CPL *kpina* ‘hungry’  
MSG *rāba*, FSG *rabθa*, CPL *rābə* ‘big’

<sup>3</sup> The NENA transcription used in this paper mostly follows a conventional Semitic transcription. This differs from the International Phonetic Alphabet (IPA) in the following characters: *č* [tʃ], *j* [dʒ], *ġ* [ɣ-β], *h* [ħ], *š* [ʃ], *x* [x-χ], *y* [j], and *ž* [ʒ]. A dot under a letter (except for *h*) indicates ‘emphatic’ articulation, which is pharyngealized/velarized in Neo-Aramaic varieties. Non-aspiration, where phonological, is represented with a circumflex accent below, e.g. *k̆* [k]. The vowel transcribed as *ə* represents roughly [ɪ-ɘ]. Vocalic length, where distinctive, is indicated with a macron, e.g. *ā* [aː], while consonantal length is indicated with doubling, e.g. *gg* [gː]. I have adapted the transcription of others to my own system, for maximum comparability: the originals can be found in the sources given. Transcription of Turoyo is dealt with in footnote 41. Transcription of Northern Kurdish and Sorani follow Kurdological conventions laid out in Chyet (2003: xxxix–xl), except for Sorani velarized *l*, for which the IPA symbol *ɭ* is used.

<sup>4</sup> E.g. Alqosh *so-yāθa* ‘old women’ (PL of *sota* ‘old woman’). The adjectival plural (of both MSG *sāwa* and FSG *sota* ‘old’) is CPL *sāwə*.

With the adoption of adjectives from neighbouring languages, mainly from Kurdish and Arabic varieties, but also from Turkic and other languages, the issue arose of how to adapt these to NENA morphology: with regard to both the adjectival stem itself and whether or how it should be inflected. Various strategies are attested and several of them can be found in any given dialect. One is to use the inherited inflection. This may be more common with adjectives that have stems which fit or have been adapted to NENA morphology, e.g. Alqosh MSG *faqira*, FSG *faqarta*, CPL *faqirə* ‘poor’ (< Arab *faqīr*) (Coghill, 2004, 275). Another is not to inflect at all, e.g. Alqosh MSG/FSG/CPL *tari* ‘fresh’ (< NKurd *teṛ*) (Coghill, 2004, 284). Another strategy is to inflect for plural, but not for gender, e.g. Alqosh SG *brəndar*, CPL *brəndārə* ‘injured’ (< NKurd *birindar*) (Coghill, 2004, 284).

Finally, we find the inflectional pattern to be addressed here, where the FSG form is inflected with \*-e, the same as the (inherited) PL. It will be referred to here as the -a-e-e inflection. In Table 1 are some examples from different dialects for illustration.

DIALECT	MSG	FSG	CPL	MEANING
Qaraqosh (Khan, 2002, 219)	<i>ṭarša</i> <i>zarqa</i>	<i>ṭaršə</i> <i>zarqə</i>	<i>ṭaršə</i> <i>zarqə</i>	‘deaf’ ‘blue’
Barwar (Khan, 2008b, 419)	<i>ḱarra</i> <i>zara</i>	<i>ḱarre</i> <i>zare</i>	<i>ḱarre</i> <i>zare</i>	‘deaf’ ‘yellow’
Betanure (Mutzafi, 2008a, 107)	<i>qutta</i> <i>sobra</i>	<i>qutte</i> <i>sobre</i>	<i>qutte</i> <i>sobre</i>	‘tailless, with docked tail’ ‘red’

Table 1: Examples of the -a-e-e inflection

In dialects where this pattern is best attested, most of the adjectives refer to human or animal characteristics, especially physical, while colour terms are also found: e.g. blind, deaf, bald, lame, one-eyed, humpbacked, albino, huge, generous, piebald, tailless, yellow, grey. Words outside these semantic fields are also found, though are less common.

It should be mentioned that, like NENA adjectives in general, terms expressing bodily characteristics may be used as nouns. An example is *ṣarjūnə* in Alqosh *dewa zəllə l-ṣarjūnə* ‘the wolf went to the (female) cripple’ (in the same text used adjectivally in *ğəa=ṣəzza ṣarjūnə* ‘a crippled nanny-goat’) (Coghill, 2004, 349, 46).

In at least a couple of dialects (Alqosh and ‘Ankawa) these words can be combined with diminutive suffixes such as -on- and -ūn- (in

adjectival or nominal use), while retaining the characteristic inflection, e.g. Alqosh *Ŷarjona* ~ *Ŷarjūna* M ‘crippled (male, DIM)’, *Ŷarjūnə* FSG ‘crippled (female, DIM)’, *ṭaršūnə* F ‘deaf (female, DIM)’, *baršūnə* F ‘albino (female, DIM)’, ‘Ankawa *kačalona* M, *kačalona* F/PL ‘bald (DIM)’, *zorakāna* M, *zurtakānə* F, *zorakānə* PL ‘little (DIM)’.<sup>5</sup>

Most dialects use two or more strategies with borrowed adjectives, with some having more alternatives than others. For instance, in Barwar, as in Alqosh, some loan adjectives take the Aramaic inflection, others have the *-a-e-e* inflection, others take only plural inflection, while others do not inflect at all (Khan, 2008b, 419–20). In J. Sulemaniyya and J. Sanandaj, by contrast, the only two strategies documented are Aramaic inflection or no inflection at all (Khan, 2004, 196; 2009, 203).

### 3. The sample and methodology

In order to answer the questions posed in §1, one needs to know about the distribution of the *-a-e-e* inflection, in two senses: (1) In which dialects is it found? (2) With which adjectival lexemes is it attested in each dialect? Its distribution across dialects can be related to the languages most in contact with those particular dialects and thus point to a possible source. Its distribution across adjectival lexemes can be looked at in relation to the origin of those adjectives (given that they are overwhelmingly loanwords), their semantics, and their form. All these may give clues as to the origin of the inflection and why it emerged and developed in the way it did.

<sup>5</sup> I thank Kawther Askar (p.c.) for the ‘Ankawa examples and their meanings. The word *zorakāna* is of particular interest. It appears to have two diminutive markers, *-k-* from Kurdish (Askar, 2014, 53) and *-ān-* from Aramaic. The use of *-ān-* instead of the more usual NENA diminutive suffix *-on-* could be due to dissimilation, given the presence of /o/ in the stem *zor-*. Alternatively, it is the suffix *-āna*, which is a common adjectivizer and nominalizer in NENA (I thank a reviewer for this suggestion). This is usually attached to nouns or verbal bases, but is attested attached to adjectives, e.g. in C. Barwar (Khan, 2008b, 414) expressing a permanent quality, and in Alqosh with another adjective of the *-a-e-e* class, *karrāna* ‘a type of bird that is deaf < *karra* ‘deaf. A motivation for it appearing on the diminutive form (and not the non-diminutive adjective *zora* ‘small’) is that the diminutive marker is associated with nouns (Khan, 2008b, 369–70) and thus the form might require an adjectivizer in order to be perceived as an adjective. The feminine form *zurtakānə* (Askar, 2014, 53) is also interesting for its double feminine inflection: *-ta* on the stem and *-ə* at the very end.

For this I looked primarily at the NENA dialects for which there is a substantial description available, whether a book (or dissertation) or long article. I supplemented the data from the sources mentioned with additional information from Neo-Aramaicist colleagues, fieldwork data from the Cambridge NENA project (on the dialects of Tin, Nargəzine-Xarjawa and Bidaro),<sup>6</sup> and new elicitation from native speakers (of Alqosh, Qaraqosh, C. Aradhin, C. Sulemaniyya and C. Sanandaj/Senaya), as well as of Mosul Arabic, mostly over telephone and messaging apps. My sample is given in Table 2. Christian dialects, which are difficult to group on genetic criteria, are loosely ordered according to region, while Jewish dialects are grouped based on categories given in Mutzafi (2008b). Where both Jews and Christians spoke Aramaic in the same place, the specific dialect is further defined by 'J.' (Jewish) and 'C.' (Christian).

	REGION/COMMUNITY	DIALECTS
A	Christian dialects of the Nineveh Plain, Iraq	Telkepe (Author fieldwork), Qaraqosh (Khan, 2002, 219–20), Barəṭle (Vean Al-Saka, p.c.), Alqosh (Coghill, 2004, 283, author fieldwork)
B	Christian dialects of Zakho, Dohuk and Amadiya districts, Iraq	C. Aradhin (Krotkoff, 1982, 45, glossary; Amal Marogy, p.c.), Tin (Author fieldwork), Barwar (Khan, 2008b, 419), Bidaro (Author fieldwork)
C	Christian dialects of the NW fringe of NENA (Şırnak, Siirt and Mardin provinces, SE Turkey)	Hertevin (Jastrow, 1988, 97), Bohtan (Fox, 2009, 94, glossary), Bēšpən (Sinha, 2000), ʿUmra (Hobrack, 2000)
D	Christian dialects of Hakkari (SE Turkey)	Hakkari dialects as a whole (Talay, 2008, 419), Ashitha (Borghero, 2005, 332–35), Bāz (Mutzafi, 2000, 318), Jilu (Fox, 1997, 63), Tkhuma (Jacobi, 1973), Shāpaṭ/Nochiya (Napiorkowska, p.c.) <sup>7</sup>
E	Christian dialects of Iranian Azerbaijan	C. Urmia (Khan, 2016a, 559–60), Sardarid (Younansardaroud, 2001)

<sup>6</sup> The questionnaire used for the associated NENA database (<https://nena.ames.cam.ac.uk/>) did not include adjectival inflection. Nevertheless, in some cases the recordings gathered for it provided examples.

<sup>7</sup> The speakers of this dialect who were interviewed are from the village Hawdiyan in Iraq, but their ancestors and their dialect originated in the Shāpaṭ region of Hakkari, which they fled during the First World War. The region is also known as Nochiya or Shamizdin (in Turkish Şemdinli). The Assyrians from there are known as *gargarnāye* or *noçiyaye*.

## BORROWED ADJECTIVAL INFLECTION

	REGION/COMMUNITY	DIALECTS
F	Christian dialects of the 'Aqra, Arbil, <sup>8</sup> Koy Sanjaq and Soran districts, Iraq	Nargəzine-Xarjawa (Author fieldwork), 'Aqra region (Al-Zebari, 2021, 292), <sup>9</sup> 'Ankawa (Kawther Askar, p.c.), Aŕmoŕa (Askar, 2020, 172–73), Diyana-Zariwaw <sup>10</sup> (Napiorkowska, 2015)
G	Christian dialects of the SE fringe of NENA (NE Iraq, NW Iran)	C. Sulemaniyya (Author fieldwork), C. Sanandaj/Senaya (Author fieldwork)
H	Jewish <i>Lishana Deni</i> dialects (NW Iraq and adjoining areas of Turkey)	J. Zakho (Sabar, 2002, 42, dictionary), 'Amədyā (Greenblatt, 2011, 255), Betanure (Mutzafi 2008a, 107), J. Dohuk (Molin, 2024), Challa (Fassberg, 2010)
I	Jewish Trans-Zab dialects	Arbil/Arbel (Khan, 1999), J. Koy Sanjaq (Mutzafi, 2004), J. Urmia (Khan, 2008a), J. Sulemaniyya (Khan, 2004), J. Sanandaj (Khan, 2009)

Table 2: The sample

To get more precise information about distribution, I created a table with all the above dialects, found which dialects had the inflection (through searching the grammatical descriptions and glossaries) and collected in the table all the adjectives attested in those dialects which had it. As many of the same lexemes were found (with slight variations) in multiple dialects, they were organized according to lexeme.

For each distinct lexeme, I found the donor language, in most cases Northern Kurdish or Arabic (presumably local Qəltu dialects, although most of the lexemes are the same in other dialects and Standard Arabic). This was not always straightforward, as loans in the region have often been borrowed indirectly, e.g. an Arabic word is borrowed into Kurdish and from there into NENA. This is apparent in some cases from the phonology and semantics but not always. Where in

<sup>8</sup> The city of Arbil is also known as Arbel, Erbil and Hawler.

<sup>9</sup> This article is specifically about adjectival morphology. It does not specify exactly which dialects the forms were drawn from. Other works by the same author on the dialects of the 'Aqra region cover two distinct groups of dialects: those of the Nəxla region, north of the 'Aqra mountain, and the dialects of the town and villages to the south (Al-Zebari and Khan 2022: 105). The latter include the dialect of Nargəzine and Xarjawa, for which I have my own data, presented here separately.

<sup>10</sup> This dialect is named after both its place of origin (Zariwaw, a village in the Baradost region of northern Iraq) and the town where its speakers settled after the First World War (the town of Diyana, further south). As the exact location of Zariwaw is unknown, the dialect is placed at Diyana on the map. Both locations are, in any case, in NE Iraq.

doubt, I attributed the word to its original source. Many of the NENA grammars helpfully provided etymologies, but I checked all of them independently, in lexicons and, occasionally, with native speakers of those languages.<sup>11</sup>

In the case of Kurdish loans, most can be assumed to have been borrowed from Northern Kurdish: most of the dialects with the inflection are located in Northern Kurdish regions and the forms almost always match those of Northern Kurdish (many of the forms are the same phonologically and semantically in Northern Kurdish and Sorani, but some differ, e.g. NKurd *lal*, Sor *lat* ‘dumb/mute’; NKurd *şil*, Sor *şel* ‘lame’). Three dialects with the *-a-e-e* inflection, however, are in contact with Sorani (‘Ankawa, Aṛmoṭa and C. Urmia)<sup>12</sup> and this explains a couple of the forms, namely ‘Ankawa/Aṛmoṭa *lāla* ‘dumb/mute’ (reflecting Sor *lat*, rather than NKurd *lab*)<sup>13</sup> and C. Urmia *zarda* ‘yellow’ (reflecting Sor *zerd*, rather than NKurd *zer*). For this reason, Sorani is given as a possible source for some words found in these dialects, even if, for most of the dialects, Northern Kurdish can be assumed to be the actual source.

The words are arranged in the table in groups according to the source language: Arabic, Kurdish, Persian, Turkic, Aramaic and uncertain. Within each group they are arranged alphabetically according to the main English translation of the NENA words (which is, unless otherwise indicated, also a translation of the source word in the donor language).

An adapted version of the table can be viewed in the appendix, with the dialects removed for which the inflection was not attested. Note that the transcription of examples is adapted in many cases for the sake of consistency.

#### 4. Observations from the sample

The distribution of the inflection is shown in Table 3. In groups A and B (both Christian dialects) all the dialects sampled have the

<sup>11</sup> Unless otherwise indicated, the source words for Arabic, Kurdish and Persian have been found in at least one of the following lexicons: (Arab) Wehr and Cowan (1979); Woodhead, Beene, and Stowasser (1967); (NKurd) Chyet (2003); Rizgar (1993); (Sor) Qazzaz (2000); (Pers) Lambton (1954). Where necessary, Aramaic origin has been confirmed by consulting Payne Smith (1903).

<sup>12</sup> ‘Ankawa is now a suburb of Arbil, where Sorani is spoken, but is not far from Northern Kurdish-speaking areas; Aṛmoṭa is a suburb of Sorani-speaking Koy Sanjaq; C. Urmia is on the Northern Kurdish-Sorani language boundary, and shows signs of contact with both (Khan, 2016a, 38).

<sup>13</sup> Emphatic *lāla* is also found in dialects of the ‘Aqra region, which is Northern Kurdish-speaking, but not far from the Sorani-speaking region.

BORROWED ADJECTIVAL INFLECTION

inflection. In Christian groups C, D, E, F and Jewish group H, some have it and others appear not to. In two groups (Christian G and Jewish I), none of the sampled dialects have it.

		INFLECTION ATTESTED	INFLECTION NOT ATTESTED
A	Christian dialects of the Nineveh Plain, Iraq	Qaraqosh, Alqosh, Telkepe, Barəṭle	
B	Christian dialects of Zakho, Dohuk and Amadiya districts, Iraq	C. Aradhin, Tin, Barwar, Bidaro	
C	Christian dialects of the NW fringe of NENA (Şırnak, Siirt and Mardin provinces, SE Turkey)	Hertevin, Bohtan	Bêşpən, ‘Umra
D	Christian dialects of Hakkari (SE Turkey)	Hakkari dialects as a whole (as described by Talay), Ashitha, Bāz, Jilu	Tkhuma (as described by Jacobi), <sup>14</sup> Shāpaṭ/Nochiya (Napiorkowska, p.c.)
E	Christian dialects of Iranian Azerbaijan	C. Urmia	Sardarid
F	Christian dialects of the ‘Aqra, Arbil, Koy Sanjaq and Soran districts, Iraq	‘Aqra region, Nargəzine-Xarjawa, ‘Ankawa, Aṛmoṭa	Diyana-Zariwaw
G	Christian dialects of the SE fringe of NENA (NE Iraq, NW Iran)		C. Sulemaniyya, C. Sanandaj/Senaya
H	Jewish <i>Lishana Deni</i> dialects (NW Iraq and adjoining areas of Turkey)	J. Zakho, ‘Amədyā, Betanure	J. Dohuk, Challa
I	Jewish Trans-Zab dialects		Arbil, J. Koy Sanjaq, J. Urmia, J. Sulemaniyya, J. Sanandaj

Table 3: Distribution of the inflection within the sample

<sup>14</sup> Tkhuma also comes under the Hakkari dialects described by Talay. It is not specified in Talay’s (2008) grammar in exactly which Hakkari dialects the adjectives listed were attested, apart from *rūṭa* and *zarra*, which are stated to be from the Timur dialect. Therefore it is not known whether the inflection was found for Tkhuma in Talay’s materials.

The inflection's absence in the Jewish Trans-Zab dialects of Arbil, Koy Sanjaq, Urmia, Sulemaniyya and Sanandaj cannot be a matter of lack of documentation: these dialects each have very extensive grammars dedicated to them. It can be concluded with confidence that the inflectional pattern does not exist in these dialects. The information given in the grammars indicates that loan adjectives are either adapted and take Aramaic inflection or are invariable (with J. Urmia also having adjectives that inflect only for plural). The sets of adjectives that are invariable (or inflect only for plural) include some of the very same loan adjectives (or their equivalents in Sorani/Central Kurdish) which elsewhere take the *-a-e-e* inflection, e.g. Arbil *kar* (invar.) 'deaf' (< NKurd/Sor *keṛ*), J. Urmia *+lāl* pl. *+lāle* 'lame' (< Sor *lat*), J. Sulemaniyya *šal* (invar.) 'lame' (< Sor *šel*), J. Sanandaj *+rut* 'naked' (< NKurd/Sor *rūt*).

The inflection's absence in two well-documented Jewish Lishana Deni dialects, J. Dohuk and Challa, is also likely to be reliable,<sup>15</sup> despite these being closely related to the Lishana Deni dialects that do have it (J. Zakho, 'Amədyā and Betanure).

Among the Christian dialects for which it is not attested, most have fairly substantial descriptions, including of adjectival inflection, so the inflection probably would have been mentioned, if it existed. For the Hakkari dialect of Tkhuma, as described in the 1970s, non-inflection for loan adjectives is mentioned, but not the *-a-e-e* inflection (Jacobi, 1973, 192). In Bēšpən (Sinha, 2000, 93–94) and Sardarid (Younansardaroud, 2001, 171–72), the options given are non-inflection or inflection only for the plural. In Sardarid examples of the latter include adjectives which elsewhere take the *-a-e-e* inflection. Likewise, in Diyana-Zariwaw, *zarda* 'yellow' is attested not inflecting for gender.<sup>16</sup> The inflection is also not attested in 'Umra, but this is a shorter description without much information on adjectival inflection, so its absence is less certain and the dialect is therefore not included in this study. A high level of certainty obtains for the Christian dialects of the south-eastern fringe, C. Sulemaniyya and C. Sanandaj/Senaya, as I carried out targeted elicitation on this question. Targeted elicitation was also carried out on my behalf for the Shāpaṭ/Nochiya dialect.

The geographical and communal (Jewish/Christian) distribution of the inflection is presented in a map in the appendix.

<sup>15</sup> No examples were found in the recordings of Challa (Steven Fassberg, p.c.).

<sup>16</sup> None of the other relevant adjectives were encountered in the fieldwork in combination with a feminine noun (Lidia Napiorkowska, p.c.).

As for the lexical distribution of the inflection in each dialect, this can be expected to be incomplete in most or all sources. Nevertheless in many grammars (and their glossaries), a reasonable number of adjectives with this inflection are given. It is very noticeable how the vast majority belong to two semantic categories—colours and bodily characteristics of humans and animals—regardless of donor language. There is some overlap between the two semantic groups, as some colour terms commonly used for animals or humans are included, e.g. ‘two-coloured’ (of animal) and ‘albino’. Much less represented in the data are non-bodily human characteristics and miscellaneous adjectives (except for ‘good’). The meanings found among adjectives with this inflection are shown in Table 4. For some of them, two or more different loanwords are attested in NENA, e.g. for ‘lame/crippled’ we find loans from Arab *ʔaʕraj*, NKurd *ʕil* (< Arab *ʔaʕall*) and NKurd *leng*<sup>17</sup> and for ‘dumb/mute’ we find loans from Arab *ʔaʕraʕ* and NKurd *lall*/Sor *lat*.

(NON-COLOUR) BODILY CHARACTERISTICS	bald, bare-headed, blind, crooked, deaf, dumb/mute, huge/mighty, hunchbacked, lame/crippled, little, naked, one-eyed, short/dwarf, squinting, tailless/docked, ugly
COLOURS (INCL. OF HUMANS AND ANIMALS)	albino, blue, brown, green, grey, multicoloured, two-coloured, with a white mark, yellow
NON-BODILY HUMAN CHARACTERISTICS	fool, generous, hardworking, miserable, pagan, perplexed/confused, slut, sweet/playful
MISCELLANEOUS	easy, fresh, good, hard/difficult, lukewarm, shallow, smooth, true

Table 4: Meanings attested across NENA with adjectives of *-a-e-e* inflection

The results confirmed that this semantic distribution (the predominance of colours and bodily characteristics) is not only found in some dialects, but universal across the dialects attested with the inflection.

As for the origin of the adjectival lexemes, this was found to vary more: in three out of the four dialects of the Nineveh Plain (Telkepe, Qaraqosh, Barəṭle), the inflectional set consists exclusively or almost exclusively of Arabic loans. In Alqosh, situated at the edge of the Plain,

<sup>17</sup> This is also found in Iranian Azeri as *läng* (Dehghani, 2000, 293) and in Persian as *lang*. All the dialects which have this word are in contact with NKurd and only one (C. Urmia) is in direct contact with Iranian Azeri and Persian, so it is most likely a direct loan from NKurd.

three are from Arabic and seven from Kurdish. In all other dialects, Northern Kurdish loans show an overwhelming predominance (even if some of these originally came from Arabic). This reflects general tendencies in loans in these dialects. In general, NENA dialects have more Kurdish loans than Arabic ones. The dialects of the Nineveh Plain, close to Mosul and Arabic-speaking villages, tend to have more Arabic loans and fewer Kurdish ones than other NENA dialects. Alqosh, being on the edge of the Plain, tends to stand somewhere between the two groups.<sup>18</sup>

A full list of the Arabic loans (with all dialectal variants) is: *baṣṣv*, *baṣša* ‘albino’, *bašša* ‘patchy’ (< *ʔabraš* ‘albino; spotted’);<sup>19</sup> *zarqv*, *zarqa* ‘blue’ (< *ʔazraq* ‘blue’); *taṣṣv* ‘deaf’ (< *ʔaṣraš* ‘deaf’); *xarṣv*, *xarsa* ‘dumb/mute’ (< *ʔaxras* ‘dumb/mute’); *sahlv* ‘easy’ (< *sahl* ‘easy’); *šaṣbv* ‘hard/difficult’ (< *šaṣb* ‘hard/difficult’); *ʕarjv*, *ʕarja*, *ʕarja* ‘lame, crippled’ (< *ʔaʕraj* ‘lame, limping’); *ʕora* ‘one-eyed’ (< *ʔaʕwar* ‘one-eyed’); *hira* ‘perplexed/confused’ (< *b-hira* ‘helpless’);<sup>20</sup> *qahpa* ‘slut’ (< *qahba* ‘whore’); *mhaqqa* ‘true’ (< *haqq* ‘truth’); *daṣba* ‘ugly’ (< *ʔadṣab* ‘lively; foolish; short and ugly’).<sup>21</sup>

A full list of the Kurdish loans is given below. All source forms are Northern Kurdish, unless otherwise indicated: *čorra* ‘albino’ (< *čûr* ~ *čwîr* ‘blonde, red-haired; albino’);<sup>22</sup> *kačala*, *kaččala*, *kačalona* ‘bald’ (< *k'eçel* ‘bald’); *sar-ḵola*, *sarqola*, *sarkola* ‘bare-headed’ (< *ser-qot* ‘bare-headed’, *k'ol* ‘hornless’); *kora*, *ḵora*, *kūra*, *qora*, *cūra* ‘blind’ (< *kor* ‘blind’); *sobra* ‘brown’ (< *sor* ~ *šobr* ‘red’); *goja* ‘crippled’ ~ ‘crooked’ (< NKurd/Sor *goc* ‘crippled in one hand’); *karra*, *ḵarra*, *kər̄ra*, *čarra*, *karra* ‘deaf’ (< NKurd/Sor *keṛ* ‘deaf’); *lāla*, *lola*, *lāla* ‘dumb/mute’ (< *lal*, Sor *lat* ‘dumb/mute’); *tarra* ‘fresh’ (< *teṛ* ‘wet; fresh’); *marda* ‘generous’ (< *merd* ‘generous’); *randa* ‘good’ (< *rind* ‘good’); *kaska* ‘green’ (< *k'esk* ‘green’); *gawra* ‘grey’, *gawrekka* ‘pale grey’, *gora* ‘brown’ (< *gewr* ‘whitish, greyish’); *rəšbara* ‘hardworking’ (< *rēnḵber* ‘labourer’); *zaxma* ‘huge, mighty’ (< *zexm* ‘strong, powerful, sturdy’ < Arab *ḍaxm* ‘huge’); *qopa* ‘hunchbacked’ (< *qop* ‘with a crippled hand’); *šəlla*, *šulla* ‘lame,

<sup>18</sup> The only other group that has considerable direct Arabic influence is the Jewish *Lishana Deni* group, as reflected already in early texts (Sabar, 1984a). *Lishana Deni* dialects also show a great deal of Kurdish influence, however, and, in the dialects with this inflection (J. Zakho, ‘Amadya, Betanure), Kurdish also predominates in the adjectival class taking it.

<sup>19</sup> The meaning given for Standard Arabic in Wehr and Cowan (1979) is ‘spotted, speckled’, but in Mosul Arabic it is used for ‘albino’ (Author’s fieldwork).

<sup>20</sup> Woodhead, Beene, and Stowasser (1967, 126).

<sup>21</sup> Lane (1867, 881).

<sup>22</sup> The meaning ‘albino’, not found in Chyet (2003), was given by a native speaker of Duhok Northern Kurdish.

crippled' (< *šil* 'paralyzed, lame' < Arab *lašall*); *lānga*, *linga*, *lənḡūla* 'lame, crippled' (< *leng* 'lame, limping'); *papūka* 'miserable' (< *p'epūk* 'weak, feeble, upset'); *rūta*, *rutta*, *rūṭa* 'naked' (< *rūt* 'naked'); *balaka* 'two-coloured', *balka* 'multicoloured' (< *belek* 'colourful; with white patches' < Arab *ʔablaq* 'piebald'); *laṭṭa*, <sup>+</sup>*laṭṭa* 'shallow' (< (?) *lat* 'flat level crag');<sup>23</sup> *čika* 'squinting' (< *qîç* 'showing ones teeth; squinting'); *qutta* 'tailless/docked' ~ 'short', *çutta* 'dwarf' (< *qut* 'cut, torn, broken off; short');<sup>24</sup> *čora* 'bearing a white mark' (of animal) (< (?) *çûr* ~ *çwîr* 'blonde, red-haired; albino'); *zara*, *zarda*, *zarra* 'yellow' (< *zer*, Sor *zerdl* Pers *zard* 'yellow').

There are a handful of words with the inflection which come from other languages. In C. Urmia, there is *yacca* 'huge' from Turkic *yekə* 'large'. In the same dialect there are also several words of Aramaic etymology, <sup>+</sup>*kuṭra* 'hunchbacked', <sup>+</sup>*pašuvva* 'lukewarm', <sup>+</sup>*čuvva* 'smooth' and *xampa* 'pagan',<sup>25</sup> demonstrating that the inflection is no longer restricted in this variety to loans. 'Ankawa has one Aramaic word attested with the inflection, *zorakāna* 'little' (based on *zora* 'small'), and Qaraqosh has Aramaic *xarša* 'dumb/mute', although the last is attested alongside its cognate *xarsa*, of Arabic origin.<sup>26</sup> A word of Persian origin, *mila* 'green, blue' (< Pers *nil* 'indigo'), is found with *-a-e-e* inflection in the Hakkari dialects, but it is actually an early loan in Aramaic, found already in Syriac as *nilā* 'indigo' (Mutzafi, 2008a, 363), so might also be understood as an inherited Aramaic item taking the inflection. Three words are of undetermined origin: 'Aqra region *fəçça* 'lame', Betanure *šaxxa* 'fool' and J. Zakho *šānga* 'sweet, playful'.

## 5. The origin of the inflection MSG *-a*, FSG/CPL *-e*

There has been no systematic study of the origin of this inflection, but an existing theory is that the feminine inflection *-e* comes from the Northern Kurdish (Kurmanji/Bahdini) feminine singular oblique nominal inflection *-ê*.

<sup>23</sup> The etymology is suggested by Khan (2008b, 419), where the Kurdish is translated as 'flat', however the translations given in the dictionaries work less well: Chyett (2003, 345) translates as a noun meaning 'flat, level crag; huge (flat) rock' and Rizgar (1993, 116) as 'rock, cliff'.

<sup>24</sup> As found in Rizgar (1993, 156).

<sup>25</sup> For etymologies, cf. Syr *qtr* 'to bind', Syr *pšis* 'lukewarm', Syr *š'āš* 'beardless, smooth' and Syr *hanpā* 'godless, pagan'.

<sup>26</sup> Author's fieldwork.

The origin of the theory appears to be Jastrow's (1988, 97) grammar of Hertevin: 'Im Gegensatz zu ererbten Adjektiven ist jedoch der feminine Singular nicht mit der Endung *-ta*, sondern gleichfalls mit *-e* gebildet, das vermutlich aus dem *-ê* des femininen casus obliquus des Kurdischen entlehnt ist (vgl. 6.1.6.(3)).'<sup>27</sup> He points out that some feminine nouns borrowed from Kurdish also end in *-e*. A Kurdish origin is also suggested by Khan (2008b, 419) for the inflection in the Barwar dialect.

Given that the next most influential contact language in NENA after Kurdish is Arabic and that the next largest group of adjectives using this inflection comes from Arabic, the only plausible alternative is that the ending comes from Arabic. There is no possible Aramaic origin that can be identified.

We will examine the arguments for and against each possible donor language in the following sections.

### 5.1 *Arguments for and against a Northern Kurdish origin*

Circumstantial evidence for a Northern Kurdish origin is that NENA shows in general more influence from Kurdish than from Arabic. Furthermore, taking evidence from all the NENA dialects with the *-a-e-e* inflection, far more of the adjectives taking the inflection are borrowed from Kurdish than from Arabic. Within the sample, only in Telkepe, Qaraqosh and Barêtle do Arabic loans predominate among the adjectives with the inflection. In all others which have at least three words attested with the inflection (Alqosh, C. Aradhin, Tin, Barwar, Hertevin, Bohtan, Hakkari dialects, Ashitha, C. Urmia, 'Aqra region, Nargazine-Xarjawa, 'Ankawa, J. Zakho, Betanure), Kurdish loans predominate in the inflectional set or there are no Arabic loans in it at all.

There are, however, two significant pieces of evidence against a Northern Kurdish origin. One is that there is no evidence for adjectives of these two semantic groups (human/animal bodily characteristics; colours) being grouped together in Kurdish, neither in their morphology nor in their syntax. Kurdish as a source for the inflection provides no explanation for why it is found specifically with these two semantic groups in NENA. As we will see in §5.2, Arabic can provide such an explanation.

<sup>27</sup> 'In contrast to inherited adjectives, however, the feminine singular is not formed with the ending *-ta*, but likewise with *-e*, which is presumably borrowed from the *-ê* of the feminine oblique case of Kurdish (cf. 6.1.6.(3))'

Another argument against a Northern Kurdish origin is that the feminine oblique ending *-ê* of Northern Kurdish is not actually applied to adjectives, only nouns (MacKenzie, 1961, 163; Thackston, 2006, 13). However, adjectives may be nominalized through other endings: MSG *-o* and FSG *-ê*, e.g. Duhok NKurd *koro* MSG ‘blind man’, *korê* FSG ‘blind woman’; *lengo* MSG ‘male cripple’, *lengê* FSG ‘female cripple’; and *kerro* MSG ‘deaf man’, *kerrê* FSG ‘deaf woman’.<sup>28</sup> These inflections also have vocative and hypocoristic functions (MacKenzie, 1961, 156). This FSG ending *-ê* (which happens to be identical to the FSG oblique inflection) is thus a candidate for the source of the FSG inflection of NENA *-a-e-e* adjectives. Nevertheless, unlike Kurdish FSG *-ê*, NENA FSG *-e* is also found on adjectives used non-referentially and thus this hypothesis requires an additional step, namely extending the ending to attributive contexts in NENA.

### 5.2 Arguments for and against a local vernacular Arabic origin

In Arabic, by contrast to Kurdish, adjectives of these semantic groups form a very clear morphological set. They share the same morphological shape (MSG  $\gamma$ aCCaC in the Semitic root-and-pattern system) and have the same inflection, which is unique to this set. This is the case for both Standard Arabic and the dialects. In Table 5, examples are given from Standard Arabic and three dialects of Iraq.

	MSG	FSG	MPL		
Standard Arabic	<i>ʔaḥmar</i> <i>ʔaxras</i>	<i>ḥamrāʔ</i> <i>xarsāʔ</i>	<i>ḥumr</i> <i>xurs~xursān</i>	‘red’ ‘dumb/mute’	(Ryding, 2005, 270–72)
M. Baghdad	<i>ʔaḥmar</i> <i>ʔabraṣ</i>	<i>ḥamra</i> <i>barṣa</i>	<i>ḥumr</i> <i>buruṣ</i>	‘red’ ‘having vitiligo; albino’	(Erwin, 1964, 254; Woodhead, Beene, and Stowasser, 1967, 118)
J. Arbil	<i>aḥmar</i> <i>aʕwar</i>	<i>ḥamrāʔ</i> <i>ʕawrāʔ</i>	<i>ḥamər</i> <i>ʕawrēn</i>	‘red’ ‘one-eyed’	(Jastrow, 1990, glossary)
C. Mosul	<i>ʔazḡaq</i> <i>ʔabḡaṣ</i> <i>ʔaʕḡaj</i>	<i>zaḡqāʔ</i> <i>baḡṣāʔ</i> <i>ʕaḡjāʔ</i>	<i>ʕaḡəj</i> , <i>ʕaḡjān</i>	‘blue’ ‘albino’ ‘lame’	(Author’s fieldwork)

Table 5: The Arabic inflection

<sup>28</sup> Author’s fieldwork.

In Barətle, all the adjectives attested with *-a-e-e* inflection are loans from precisely this Arabic set and they have borrowed the first part of the feminine form as their stem: CaCC-. In Telkepe, the adjectives with the inflection (here *-v-ə-ə*) are mostly loans from the Arabic set and also have the stem CaCC-. The two Telkepe adjectives with the inflection that are not from the Arabic set nor from the semantic groups of colours and bodily characteristics (*sablv* ‘easy’, *şablv* ‘hard, difficult’) are nevertheless Arabic adjectives with a CaCC- stem, so may have been added through analogy.<sup>29</sup> In Qaraqosh, all the adjectives are from the Arabic set and have the stem CaCC-, except for *mhaqq-a* ‘true’ (Khan, 2002, 219–220). In Alqosh, five out of the nine attested words with the inflection (including two which are Kurdish) have the stem CaCC- (Coghill, 2004, 283).

How can these facts be explained? A possible course of development is that the inflection was first applied to loans of Arabic *ʔaCCaC* adjectives, then applied by analogy to other Arabic adjectives with similar morphology. In dialects with more Kurdish influence, it was then extended by analogy to Kurdish adjectives of the same semantic groups. Support for this scenario is given by the fact that such an extension is attested in the Jewish Arabic dialect of Arbil. Here, by analogy with MSG *ʔašwar*, FSG *ʔawrā* ‘one-eyed’, we find MSG *kačal*, FSG *kačlā* ‘bald’ (Jastrow, 1990, glossary), where *kačal* is a borrowing from Kurdish. Rather than remaining uninflected, or taking the usual adjectival inflection in this dialect, *-e* (Jastrow, 1990, 70), it forms its feminine following the same template as for Arabic colours and bodily characteristics: CaCCá. This is despite the fact that the masculine form *kačal* does not at all fit the masculine template. The only reason for adopting this inflection can be that it belongs to the relevant semantic field.

The above establishes that the semantics of the words in this inflectional class strongly suggest an Arabic origin and, further, that it is quite plausible for the inflection to have been extended in NENA beyond the original set, including to words of another origin.

What is less clear is where the FSG *-e* inflection itself could have come from. The Qəltu Arabic dialects of the region usually have a FSG *-e* or *-i* inflection (< Old Arab *\*-a*) on adjectives and nouns, due

<sup>29</sup> These two adjectives (Arabic *sabl* and *şab*) are also common in the elative form, which shares the *ʔaCCaC* pattern (*ʔašhal* ‘easier, easiest’, *ʔaššab* ‘harder, hardest’), though not the feminine or plural patterns. This is possibly an additional factor causing them to be associated with the other set.

to the raising of 'a' vowels (known as *imāla*). However, *-e* is not found on adjectives of the class of colours and bodily characteristics. The Arabic dialects of northern Iraq (e.g. Mosul and Jewish Arbil) are only documented with FSG *-ā́* (not *-ḗ*) for adjectives of this type: *imāla* is not applied to this ending.<sup>30</sup> *Imāla* is applied to these adjectives in the dialect of Hama, Syria,<sup>31</sup> but this is too far away to have had any influence. The *-ā́* ending on the feminine adjectives of this type would be expected, if borrowed, to be realized as a short *-a* in NENA, after a regular retraction of stress, i.e. Qəltu Arabic FSG *ʕawrā́* 'one-eyed' (as in J. Arbil and C. Āzəx) would be expected to be borrowed as NENA \*\**ʕawra*,<sup>32</sup> yet the actual FSG form in NENA ends in *-e/-ə* (in 'Ankawa, with regular \*aw>o, it is *ʕorə* 'one-eyed (FSG)').

Another difficulty is the fact that most of the adjectives taking this inflection in NENA as a whole are Kurdish. Inflections can certainly spread to words of different origin, but, at the very least, it does not strengthen the Arabic hypothesis.

### 5.3 *Distribution across dialects*

For evidence in support of a Kurdish or Arabic origin, one can look more closely at the distribution of the *-a-e-e* inflection across the dialects. Which dialects have the inflection, and which languages were they in most contact with? Table 6 shows all the dialects investigated in this study (divided according to religion), arranged according to geographical region, giving the main local vernaculars (based on Coghill, 2020, 498). It is stated for each group whether the inflection is attested (Y), or not (N) or partially (P), where more than one dialect is attested.

<sup>30</sup> Qəltu dialects in general, including in northern Iraq, mostly have stressed *-ā́*, e.g. J. Arbil Arabic *ʕamyā́* 'blind' and *ʕawrā́* 'one-eyed' (Jastrow, 1990, glossary) and C. Mosul Arabic *bēḏā́* and *xəḏḡā́* (Jastrow, 2004, 143). A few dialects outside northern Iraq have unstressed *-a* (Jastrow, 1978, 75–76).

<sup>31</sup> E.g. *sōde* 'black (FSG)', *šarme* 'with a cleft lip (FSG)', *tarše* 'deaf (FSG)' (Klimiuk, forthcoming).

<sup>32</sup> In those NENA dialects with penultimate stress. All the dialects attested with the *-a-e-e* inflection have penultimate stress.

## BORROWED ADJECTIVAL INFLECTION

Region	Local Vernaculars	Christian NENA	Y/N/P	Jewish NENA	Y/N/P
Plain north and east of Mosul, Iraq	NKurd, Qəltu Arab, Turkman	Qaraqoşh, Alqoşh, Telkepe, Barətle	Y	—	—
Zakho region, Iraq	NKurd	Bidaro	Y	J. Zakho	Y
Dohuk and Amadiya districts, Iraq	NKurd, Turkman	C. Aradhin, Tin, Barwar	Y	‘Amədyā, Betanure, J. Dohuk	P
Şırnak, Siirt and Mardin provinces, Turkey	NKurd, Qəltu Arabic	Hertevin, Bohtan, Bēşpən	P	— <sup>33</sup>	
Hakkari province, Turkey	NKurd	Hakkari dialects as a whole, Ashitha, Bāz, Jilu, Tkhuma, Shāpaṭ/Nochiya	P	Challa	N
‘Aqra, Erbil, Koy Sanjaq and Soran districts, Iraq	Sor (but close to NKurd), Jewish Qəltu Arab, Turkman	‘Aqra region, Nargəzine-Xarjawa, ‘Ankawa, Aṛmoṭa, Diyana-Zariwaw	P	Arbil, J. Koy Sanjaq	N
SE fringe of NENA (NE Iraq, NW Iran)	Sor, Gorani, Turkman	C. Sulemaniyya, C. Sanandaj/Senaya	N	J. Sulemaniyya, J. Sanandaj	N
Iranian Azerbaijan <sup>34</sup>	Iranian Azeri, NKurd, Sor, Armenian	C. Urmia, Sardarid	P	J. Urmia	N

Table 6: Distribution in relation to contact languages

The picture is more complicated than the table shows, as one should ideally take into account historical migrations (meaning that a NENA dialect at an earlier stage had more—or less—contact with a particular contact variety) and dialect contact, which was probably more likely between communities sharing a religion (that is, among Christian

<sup>33</sup> The Jewish Gzira dialect (one of the Lishana Deni group) is spoken in this region, but I found no examples in the single published source on this dialect (Nakano, 1973).

<sup>34</sup> The J. and C. Sal(a)mas dialects were spoken in the north of this region, but sources on them are sparse and the inflection is not mentioned.

dialects and among Jewish dialects). These factors, which are as yet under-investigated,<sup>35</sup> could explain how Christian and Jewish varieties in the same location show differing contact influences, including in terms of the presence and absence of this inflection. The information in Table 6, therefore, needs to be supplemented by information from the grammatical descriptions regarding the general degree of influence from the different contact varieties.

From the table we see that, in nearly every region, at least some Christian dialects have the inflection. Some of these in general show more direct contact influence from Arabic, such as the dialects around Mosul (Khan, 2002, xxiii–xxiv, 8–9), while others show more influence from Northern Kurdish with much less direct influence from Arabic, such as Barwar (Khan, 2008b, 18–22). For C. Urmia, however, Khan (2016a, 1; 2016b, 2–3) finds evidence that the dialect was in direct contact with Arabic at an earlier stage, probably before its speakers' migration to the Urmia plain. Only in the south-eastern fringe of NENA, furthest from both Arabic and Northern Kurdish, is the inflection entirely unattested (C. Sulemaniyya and C. Sanandaj/Senaya). Two Christian dialects in the Sorani-speaking region (‘Ankawa and Armoṭa) *do* have the inflection. These dialects are, however, located not too far from Northern Kurdish-speaking areas and show considerable influence from Arabic in general (Askar, 2014, 27, 55; 2020, 10–11).

Among the Jewish dialects, the inflection is less well attested. It is only found in the Lishana Deni dialects spoken in the Zakho and Dohuk-Amadiya regions, where Northern Kurdish dominates, although Lishana Deni dialects do generally show considerable influence from Arabic, perhaps due to longer-distance contacts with Arabic-speaking Jews (Sabar, 1978, 217; 1984a; 2002, 3).<sup>36</sup> The inflection is absent in the Jewish dialects of Sorani-speaking regions, even Iranian Azerbaijan, where Northern Kurdish was also spoken, and Arbil, where Arabic speaking Jews lived in the city and Northern Kurdish was spoken not far away. These dialects in general show little direct influence from Arabic: for J. Arbil see Khan (1999, 11), for J. Sulemaniyya Khan (2004, 177), for J. Sanandaj Khan (2009, 176, 80) and for J. Urmia Khan (2008a, 383).

<sup>35</sup> One work which discusses them in more detail is Khan and Mohammadirad (2024), see in particular 510–511.

<sup>36</sup> For ‘Amāḍya, however, Hoberman (1989, 9–10) reports that few Jews knew Iraqi Arabic, so actual familiarity with the language may have varied over time and space.

It is clear that the FSG *-e* inflection does not come from Sorani/Central Kurdish, as there is no known potential source for it in that language, and the inflection is not found on the south-eastern NENA fringe, furthest into the Sorani-speaking region. However, the information above does not alone conclusively point towards either Northern Kurdish or Arabic as a source. The Jewish dialects which have the inflection generally show contact influences from both Northern Kurdish and Arabic. The Christian dialects of the plain around Mosul, which have the inflection, show less Northern Kurdish influence in general and more direct Arabic influence, but some other Christian dialects which have it show considerable Northern Kurdish influence and little direct Arabic influence. It is likely, therefore, that the *-a-e-e* inflection arose in an area of direct contact with the donor language (be it Arabic or Northern Kurdish) then spread to other Christian dialects outside that area.

#### 5.4 *A solution*

The evidence in §§5.1–5.2 points to Arabic as the source of the inflection and the evidence in §5.3 at least does not exclude it, but problems remain. In this section I will try to solve these problems. If, for example, vernacular Arabic FSG *ṭaršā* ‘deaf’ was borrowed and became *ṭarša* in NENA and the stem *ṭarš-* was generalized to NENA MSG and CPL, then there would have been no distinction between MSG and FSG (although a FSG/CPL distinction would exist). We would find:

\*\*MSG *ṭarša*, FSG *ṭarša*, CPL *ṭaršə* ‘deaf’

A possible explanation for adopting instead the dialectal Arabic feminine ending *-e* is that it was useful to preserve the MSG/FSG distinction. While some loan adjectives in NENA do not retain this distinction and only distinguish common singular and plural, it may have been felt useful for words regularly used of humans (and commonly as nouns), where the gender distinction is particularly salient.

It may also be that the Northern Kurdish vocative/hypocoristic/nominalizing feminine inflection (§5.1), although restricted in Kurdish to nouns, was a secondary factor encouraging the adoption of *-e*. On this point some relevant evidence can be found in certain Anatolian Qəltu Arabic dialects and their treatment of Northern Kurdish loans. In the Arabic dialects of Daragözü, Qarṭmīn and Āzəx (Turkey), Kurdish loans of this semantic field in the FSG end in *-ē*, not *-ā* like the native Arabic adjectives (Jastrow, 1978, 75–76; Wittrich, 2001, 112–13): see Table 7.

	KURDISH LOAN ADJECTIVES	NATIVE ARABIC ADJECTIVES
Āzəx	FSG <i>karr-ê</i> 'deaf', FSG <i>lāl-ê</i> 'dumb/mute', FSG <i>qutî-ê</i> 'of short stature'	FSG <i>ʕamyā</i> 'blind', FSG <i>ʕawrā</i> 'one-eyed'
Daragözü	FSG <i>şîn-ê</i> 'green'	FSG <i>bîzā</i> 'white'

Table 7: Feminine inflection of Kurdish loan adjectives in some Anatolian Qəltu Arabic dialects

This is clearly not the native Arabic FSG ending, which is a short unstressed *-e*, except when following emphatic or back consonants, when it is *-a* (Jastrow, 1978, 70–74; Wittrich, 2001, 110), e.g. Āzəx FSG *nəşf-e* 'dry', FSG *taşwîl-e* 'tall' and FSG *fârğ-a* 'empty' (Wittrich, 2001, 99, 101, 10). Neither is it the same as the Northern Kurdish vocative/hypocoristic/nominalizing feminine inflection, which is an unstressed *-ê* [e:] (§5.1). It is difficult to see where the *-ê* originates, unless in a merger of the Kurdish inflection and the Arabic stressed *-ā* ending of adjectives of colour and bodily characteristics. If the Kurdish inflection did indeed play a role in this, then it may also have been an additional factor encouraging the adoption of FSG *-e* for the NENA borrowed adjectives, especially in the extension to Kurdish loans.

If the above scenario is correct, and the inflection came from Arabic and was first used with borrowed Arabic adjectives of colours and bodily characteristics, then presumably the inflection would have first been borrowed in dialects in closer contact with Arabic: most likely the Christian dialects of the Nineveh Plain. From these it would then have spread to other dialects (Christian and, to a lesser extent, Jewish) and also to many other adjectives with the same semantics, of Kurdish and other origin.

### 5.5 Supporting evidence from Turoyo<sup>37</sup>

Turoyo is another modern Aramaic variety in contact with both Arabic and Northern Kurdish. Given that it is a similar language existing under similar conditions, it would not be too surprising if we were to find similar lexical and morphological loans. Turoyo does indeed have many loanwords from both local Arabic and Northern Kurdish varieties. We also find borrowed inflections on both nouns and adjectives: below it will be shown that these inflections are indisputably of Arabic origin, including a FSG *-e* inflection found on loan adjectives, many

<sup>37</sup> I thank Nikita Kuzin and Shabo Talay for alerting me to the relevant facts in Turoyo.

of them from the semantic fields of bodily characteristics and colours. The evidence here is drawn from Jastrow's (1985) grammar and the glossaries/lexicons of Ritter (Betzold and Ritter, 2012), Jastrow, Talay, and Kuzin (2024) and Beṭ-Şawoçe (Beṭ-Şawoçe, Parisot, and Björklund, 2010; Beṭ-Şawoçe, 2012).

In the most well documented dialect, that of the village Mîdin (Jastrow, 1985, 238), un-adapted<sup>38</sup> loan adjectives are usually uninflected and thus FSG *-e* is not found on adjectives. The sole exception is the loan adjective *rāşt* 'right', e.g. *liḏi li-rāşte* 'my right hand' (Jastrow takes this to be the Kurdish FSG oblique ending).<sup>39</sup> On the other hand, Jastrow states that newer loans from Arabic are borrowed with their Arabic inflection, e.g. *şat̄er*, FSG *şat̄r-a*, PL *şat̄r-în* 'clever'. The single example given has the expected *-a* allomorph, so one can only extrapolate that *-e* would also be attested, under the usual phonological conditions.

Much more evidence comes from the above glossaries/lexicons, reflecting other dialects. In the glossary of Ritter (reflecting a range of dialects), the lexicon and glossary of Beṭ-Şawoçe (reflecting the Midyat [*madyad*] dialect) and the newly appeared glossary of the Midyat dialect by Jastrow, Talay, and Kuzin (2024), we find a FSG *-e* inflection on many loan adjectives—Arabic, Kurdish and other—along with a PL<sup>40</sup> inflection *-în*.<sup>41</sup> These are identical to the adjectival inflection in

<sup>38</sup> Some loans are adapted to Turoyo morphology, in which case they are inflected with inherited inflection (MSG *-o*, FSG *-to*, CPL *-e*), e.g. *ğamudo* 'cold', *kayiso* 'good' (both < Arab).

<sup>39</sup> In Kurdo's (1960, 629) dictionary of Northern Kurdish, *rāst* 'right' is indeed given with the FSG oblique ending: *destê rāstê* 'right hand'.

<sup>40</sup> It is not always clear in the sources whether a plural ending is common plural or specifically MPL or FPL. When in doubt, I use 'PL', rather than specify further.

<sup>41</sup> In the transcription of Turoyo, *d̄* = [ð] and *ḡ* = [d̡]. The transcriptions used by Ritter, Beṭ-Şawoçe, and Jastrow/Talay/Kuzin vary. For Ritter's transcription, see the key in Ritter (1990, 19–20). I mostly adapt transcriptions to the Semitist conventions used by Jastrow, Talay, and Kuzin (2024) (e.g. for Ritter's *ç*, I transcribe *ç̣*). I ignore Ritter's *alü* distinction, which I suspect is allophonic based on surrounding consonants, in favour of *a*. I also follow the general policy today of only marking vowel length when it is unexpected, i.e. short in an open syllable or long in a closed one (in general: some inconsistencies may remain). I retain Ritter's distinctions of aspirated and unaspirated *k*, *p* and *t*, which were apparently retained by his informants in loans from Kurdish, but I transcribe the unaspirated variants as *ḳ*, *p̣* and *ṭ* respectively, rather than as *k̄*, *p̄*, and *t̄* as he does. I also retain his transcription of Kurdish *ṛ*, which he identified as distinct from Arabic/Turoyo *rr* (Ritter, 1967, 30) and retain his distinct transcription of *ç̣*, which he describes as 'palatalisertes (sic), kurdisches ç̣', distinct from 'türkisches ç̣' (which I transcribe as *ç̣*) (Ritter, 1990, 19). From its distribution in his glossary (*çuç̣əko* 'small, young', *ç̣iroke* 'fairytale', but

local vernacular Qəltu Arabic dialects, such as nearby Āzəx (Wittrich, 2001, 99).<sup>42</sup> The FSG inflection *-e* and PL inflection *-in* are found in the Turoyo glossaries/lexicons on loan adjectives ending (in the masculine) in *-C* and *-i*, and also on those which have acquired the Aramaic MSG ending *-o*. Sometimes FPL *-at* (< Arab *-āt*) is also given as a plural inflection, alongside (M)PL *-in*. In general, adjectives in Turoyo do not inflect for gender in the plural (Jastrow, 1985, 239). The gender distinction in the plural would be expected when the words are used referentially as nouns, but, surprisingly, FPL *-at* is attested even in attributive adjectival use in Midyat.<sup>43</sup> This raises the question of whether these forms are actually better understood as nouns which may be used in apposition to other nouns, but this lies outside the scope of the present paper.

As for which loans the Arabic inflections are applied to, FSG *-e* and PL *-in* are found on both Arabic and Northern Kurdish loan adjectives.<sup>44</sup> The words I found in these sources with FSG *-e* and/or PL *-in* inflection (not intended to be comprehensive) are as follows:

Northern Kurdish origin: *bālāko* ‘piebald’ (< *belek* ‘colourful, piebald’), *bōz* ~ *bozək* ‘grey-coloured, grey-haired (e.g. of horse)’ (< *boz* ‘grey, e.g. of horse or donkey’), *čappi* ‘left-handed’ (< *çep* ‘left’), *čučko* ~ *čučko* ‘small, young’ (< *ç’učk’ik* ‘small, little; child’), *karr* ~ *kār* ~ *kāro* ‘deaf’ (< *keř* ‘deaf’), *lalo* ‘dumb/mute’ (< *lal* ‘dumb/mute’), *pīs* ‘bad’ (< *p’is* ‘dirty; dishonourable’), *qamar* ‘dark-brown (e.g. of horse)’

*čarox* ‘sandals’, *čappi* ‘left-handed’), it appears *ç* may represent Kurdish aspirated *ç*’ (cf. *ç’učk’ik*, *ç’irok*; *čarox*, *çep*).

<sup>42</sup> As a reviewer points out, the Northern Kurdish of Mardin has *-in* as a plural marker on indefinite nouns (Haig and Öpengin, 2018, 175), and some of the Turoyo words which end in *-in* are Kurdish in origin. The Kurdish morpheme, however, has an /i/, which is realized as a short, central, mid-high vowel, according to Haig and Öpengin (2018, 165–67), unlike the Arabic and Turoyo plural suffixes, which both have a long /ī/ ([iː]). Moreover, the inflections as a set—FSG *-e*, MPL *-in*, FPL *-at*—show a clear parallel to the Arabic inflectional paradigm.

<sup>43</sup> E.g. *maye zalil-e*, *xušk-at hewor-e* [water[PL] fresh-CPL beautiful-FPL clean-CPL] ‘fresh, beautiful, clean water’ (unpublished text, Nikita Kuzin p.c.). This usage is confirmed for Midyat by Jan Beṭ-Şawoçe (p.c.). I thank Nikita Kuzin for searching a digital Turoyo corpus for examples of these adjectives on my behalf. Such a MPL/FPL distinction is not attested, to my knowledge, for any NENA adjectives: in Alqosh, for instance, ‘lame nanny-goats’ is *ʔəzzāθa ʕarj-ə* [nanny\_goats (FPL) lame-CPL] (author’s fieldwork).

<sup>44</sup> Note that, for some, only the feminine singular or only the plural is given. Furthermore, where a word is found in both sources, sometimes Ritter and Beṭ-Sawoçe do not give precisely the same forms (for instance, for *čučko* ‘small’, Ritter gives both *-e* and *-in* as possible plurals, while Beṭ-Sawoçe only gives *-in*). Such variation is not surprising. The reader can consult the glossaries to find the precise forms documented in the different sources.

(< *qemer* ‘swarthy; dark (of horses)’), *qart* ‘tough, hard’ (< *qert* ‘tough’),<sup>45</sup> *qutto* ‘short; tailless’ (< *qut* ‘cut, torn, broken off; short’), *šahṭ* ‘lame, cripple’ (< *šeht* ~ *šeḥt* ‘paralyzed, crippled, lame’), *zāxəm* ~ *zaxm* ‘strong, capable’ (< *zexem* ‘strong, powerful’ < Arab *daxm*).

Arabic origin: *bašīt* ‘simple’ (< *basīt* ‘simple’), *baxīl* ‘jealous’ (< *baxīl* ‘stingy’), *ḥalal* ‘permitted, good’ (< *ḥalāl* ‘permitted’), *ḥaram* ‘forbidden, bad’ (< *ḥarām* ‘forbidden’), *xasīs* ‘stingy’ (< *xasīs* ‘stingy’).

Other origin: *sāqat* ~ *šāqat* ‘lame’ (< Turk *sakat*, but possibly via NKurd *seqet*).

Most of these words clearly fit into the semantic group of human/animal bodily characteristics, as in NENA. As will be shown below, some colours also take Arabic inflections.

A particular set of Arabic loans is attested with a joint FSG/CPL inflection, *-e*, which is a parallel to the NENA *-a-e-e* inflection. As in NENA, the CPL *-e* inflection is the inherited Aramaic inflection. This set comprises Arabic loans ending in the adjectivalizing suffix *-i* (known in Arabic as *nisba*). Many of the words of this type refer to nationalities and are commonly used both as adjectives and nouns, e.g. *faransawi* ‘French(-man)’, *ḥandi* ‘Indian’, *ḥənglisi* ~ *ḥənglizi* ‘English(-man)’, *tirki* ‘Turkish, Turk’, *qārāči* ‘Gypsy’ and many others. In Ritter’s glossary and Jastrow, Talay, and Kuzin (2024), such words take *-e* (with a glide *y*, thus *-iye*) for both FSG and CPL, e.g. MSG *iṭālyani*, FSG *iṭālyaniye*, CPL *iṭālyaniye* (Jastrow, Talay and Kuzin, 2024, 132). In Beṭ-Sawoče’s lexicons, on the other hand, the FSG/CPL *-e* inflection is not found. Instead they are generally given in four forms, with Arabic plurals: MSG *-i*, MPL *-iy-īn*, FSG *-iy-e*, FPL *-iy-at*, and Beṭ-Sawoče (p.c.) confirms that the FPL *-iyat* is used adjectivally (e.g. *niše faransawiyat* ‘French women’).

Other loan adjectives taking Arabic inflections are derived colour terms. Most of these end in the same *nisba -i* ending in their masculine form, although the lexeme itself is not necessarily of Arabic origin, e.g. *čeni* ‘blue’ (cf. NKurd *šîn* ‘green, blue’). According to Beṭ-Sawoče’s (2010; 2012) works, the FSG form is *čeniye* and the PL *čūweni* (i.e. an Arabic templatic plural). The plural is supported also by Ritter (Betzold and Ritter, 2012, 41). Other colour terms ending in *-i* with FSG *-iye* are *kəḥli* ‘dark blue’, *bənni* ‘brown’ (< Arab *binni* ‘brown’), and *qəḥwarangi* ‘brown’ (< Arab *qəḥwa* ‘coffee’, NKurd *reng* ‘colour’). Two others do not end in *-i* in the masculine, but show signs of it etymologically: *čeniko* ‘bluish, yellowish’ < \**čeni* + DIM *-k* + MSG *-o* (FSG *čenike*), and *nilo* (FSG *niliye* < \**nili-* + *-e*).

<sup>45</sup> See Rizgar (1993, 362), under the entry for ‘tough’.

Adjectival endings in Aramaic varieties have generally the same forms as those found on nouns. It is therefore useful to also take a look at Turoyo nouns of foreign origin. Here we find borrowed morphology is common even in the dialect of Midin, as a list of loanwords in Jastrow (1985, 200–13) shows. Many borrowed Arabic F nouns in the Turoyo of all sources end in *-e*, as in Qeltu Arabic, e.g. *šade* F ‘custom’ (Betzold and Ritter, 2012; Beṭ-Şawoçe, 2012). Others take the back allomorph *-a*, e.g. *daqiqā* ‘minute’ (Betzold and Ritter, 2012).

The F nouns ending in *-e* or *-a* generally take as their plural *-at*<sup>46</sup> or another Arabic inflection (*-awat* < Arab *-awāt*, or a templatic plural), e.g. *šade* F ‘custom’—PL *šadat*, *šayle* ~ *šāyle* F ‘family’—PL *šaylat* (Betzold and Ritter, 2012; Beṭ-Şawoçe, 2012; Jastrow, Talay and Kuzin, 2024), *wālaye* F ‘town’—PL *wālayat* (Jastrow, 1985; Jastrow, Talay and Kuzin, 2024), and *šalbe* F ‘box’—PL *šalab* (Jastrow, 1985). Many loans from other languages<sup>47</sup> also have a F ending *-e* and Arabic plural, e.g. *šantrike* F ‘electric torch’—PL *-āt* (Betzold and Ritter, 2012), *lašē* F ‘corpse’—PL *lašawat* (Jastrow, 1985, 224) < NKurd *laš* ‘body’, *pire* F ‘old woman’—PL *pirat* (Jastrow, 1985, 209) < NKurd *pirê* ‘old woman’, *pirke* F ‘midwife; grandmother’—PL *pirkat* (Jastrow, 1985, 209) < NKurd *pirik* ‘grandmother; midwife’, *tope* F ‘cannon’—PL *-at* (Jastrow, 1985, 212) < Turk *top* ‘cannon’, possibly via NKurd.

Other Arabic plurals, including *-în* and a templatic CvCeCəC plural pattern (Jastrow, 1985, 225) are also found with loans of both Arabic and non-Arabic origin, e.g. *bāz* M ‘falcon’—PL *bazîn* (Betzold and Ritter, 2012; Beṭ-Şawoçe 2012) < Arab *bāz*/NKurd *baz* ‘falcon’, *xanğar* F ‘dagger’—PL *xaneğər* (Jastrow, 1985, 225) < Arab *xanjar* ‘dagger’, *çarax* M ‘traditional leather shoes’—PL *čawerəx* (Jastrow, 1985, 225) < NKurd *çarox* ‘peasant leather shoe/sandal’, *čugan* M ‘walking stick’—PL *čuwegən* (Jastrow, 1985, 225) < NKurd *çogan* ‘stick’, *fabriqa* F ‘factory’—PL *fabarəq* (Betzold and Ritter, 2012, 57).

It is not surprising to find inflections in Turoyo borrowed from Arabic: Arabic influence is strong in Turoyo (Tezel, 2003, 24; Waltisberg,

<sup>46</sup> In the glossaries of Betzold and Ritter (2012) and Jastrow, Talay, and Kuzin (2024), the plural may be stressed *-āt*, as in the Arabic original, or unstressed *-at*. In Beṭ-Şawoçe, Parisot, and Björklund (2010); Beṭ-Şawoçe (2012) and Jastrow’s (1985) grammar of Midin it is always given as unstressed *-at*.

<sup>47</sup> Note that, as with NENA, we often cannot identify the history of loans: whether they have come from the source language directly or via another language. In this case the words may have been borrowed via Arabic and thereby acquired the Arabic inflections before they were adopted by Turoyo; alternatively they may have been borrowed directly from the source language and then acquired the Arabic inflections by analogy with Arabic loanwords in Turoyo.

2013, 353; Furman and Loesov, 2016, 5). Even templatic morphology has been borrowed: the templatic plural CvCeCəC mentioned above, the elative pattern (?)aCCaC (Jastrow, 1985, 238; Souag, 2020, 487–88) and (albeit not productively) verbal derivations (Coghill, 2015, 97–103; Kuzin, forthcoming). It is also unsurprising that we see the Arabic adjectival inflections particularly in Midyat, as the town is known to have more Arabic influence, compared to the villages (Tezel, 2003, 24; Barsky, Furman and Loesov, 2018, 106).

From the above, it is clear that Arabic gender and plural inflections have been borrowed in Turoyo varieties for both nouns and adjectives and F *-e* is one of these. Like the other inflections, it has also been extensively applied to non-Arabic loans, including adjectives describing colours and bodily characteristics of humans and animals.

Turoyo does not provide an exact parallel to the NENA inflection: the shared FSG/CPL *-e* inflection is limited to adjectives ending in *-i*. However, the existence of a F inflection *-e* which is clearly of Arabic origin and its use with many of the same words as for NENA, including the Kurdish ones, suggests that an Arabic origin for the NENA *-e* is very plausible.

## 6. How old is the inflection?

The *-a-e-e* inflection is documented in Maclean's (1895, 58) grammar of the Christian dialects of Iraq and Turkey, based on fieldwork undertaken during the Anglican mission in the 1880s–90s. In Maclean it is attested with borrowed adjectives *jwanqa* 'beautiful', *zaxma* 'energetic, bold', *zarda* 'yellow', *kūra* 'blind', *karra* 'deaf', *lāla* 'dumb/mute', *marda* 'bold, generous', and Aramaic *quṭra* 'humpbacked'.<sup>48</sup> All but *jwanqa* are attested with the inflection in modern dialects.

The inflection is also documented even earlier, in Stoddard's (1855, 128) grammar, which was compiled during his residence at the mission in Urmia from 1843 onwards. Those that inflect with *-a-e-e* again include familiar ones: *karra* (no meaning given, but presumably 'deaf'), *kūra* 'blind', *laṣla* 'dumb/mute', *marda* 'bold', and *zaxma* 'energetic'.

The inflection appears not to be attested in the 16<sup>th</sup>–17<sup>th</sup> century Christian poetry of the Mosul Plain, but it cannot be excluded that this is a chance omission, given that words with the relevant meanings are sparse in the texts (and thus glossary) of Mengozzi (2002).

<sup>48</sup> It is also attested with the following borrowed nouns: *qūla* 'male slave', *qūle* 'female slave'.

I was also unable to find any examples of the inflection in the published 17<sup>th</sup> century Jewish Nerwa texts, although my search was not exhaustive. The dialect of these texts already showed considerable influence from Arabic (Sabar, 1976, XLII; 1984a) as well as Kurdish.<sup>49</sup> Sabar (1984a, 206) finds that, in the Nerwa texts, borrowed adjectives are not inflected, although none of his examples include adjectives of colours or bodily characteristics. He does give some exceptions, where either the Aramaic FSG inflection *-ta* is used or the adjective is borrowed with the Arabic plural inflection *-în*. The introduction to his (2002, 42) dictionary of the Jewish Lishana Deni dialects gives examples of the inflection (e.g. MSG *šarja*, FSG *šarje* ‘lame’, also with *karra* ‘deaf’, *šanga* ‘sweet, playful’, and *qutta* ‘short’) but does not state whether these are attested in the manuscripts or just in the modern dialects. The Nerwa text *Pəšaṭ Wayəhi Bəšallah* (Sabar, 1976, 52) provides examples of an adjective which takes the *-a-e-e* inflection in modern dialects, *šəlla* ‘crippled’, but we do not find it with a feminine noun (only M *šəlla*, agreeing with *brona* M ‘son’, and PL *šəlle*). Sabar’s dictionary (2002, 207) mentions an occurrence of *langu* ‘lame’ in a further, unpublished, Nerwa manuscript, but without mentioning any inflection.

From the above evidence, the earliest attestation is likely from the 1840s, but, given its wide distribution among NENA dialects, the presence of significant Arabic (and Kurdish) influence already in the 17<sup>th</sup> century, and attestation of the relevant lexemes in that period, it is likely that the inflection emerged much earlier.

## 7. Motivations

When words are borrowed into another language, speakers of the recipient language have the choice to borrow with them the original inflections of the source or to apply inherited inflections to them. In the case we have here, we see a blended paradigm of two inherited inflections (MSG *-a*, CPL *-e*) and one borrowed (FSG *-e*). How do we explain the exception made for the feminine?

The answer may lie in the preservation of syllabic structure. Inherited Aramaic adjectives have stems that mostly fall into a limited set of basic CV patterns, e.g. CCiCa, CaCiCa, CaCūCa,<sup>50</sup> along with

<sup>49</sup> As evidenced by the many entries marked ‘K.’ (Kurdish) in the glossaries of Sabar (1976) and Sabar (1984b).

<sup>50</sup> Qaraqosh has one inherited adjective of the pattern CaCCa, namely *xarša* ‘dumb’ (also attested in Maclean, 1901, 107), but this pattern is very unusual among inherited NENA adjectives, and *xarša*, along with borrowed variant *xarsa* (< Arab),

regular variants for weak roots. The stems are the same before the two vocalic endings, MSG *\*-a* and CPL *\*-e*, but are usually different when the FSG ending *\*-ta* or *\*-θa* is added, as this starts with a consonant, causing a closing or opening of a syllable and/or resyllabification of the stem, as well as resultant vowel changes and assimilations. These are illustrated by examples from Alqosh in Table 8.

MSG, PL	FSG	
<i>kpīn-a, kpīn-ə</i>	<i>kpən-ta</i>	‘hungry’
<i>qariw-a, qariw-ə</i>	<i>qarū-ta</i>	‘near’
<i>kom-a, kom-ə</i>	<i>kom-ta ~ kam-ta</i>	‘black’
<i>mriʔ-a, mriʔ-ə</i>	<i>mre-ta</i>	‘ill’
<i>məly-a, məly-ə</i>	<i>mli-θa</i>	‘full’
<i>qūy-a, qūy-ə</i>	<i>qwi-θa</i>	‘strong’
<i>qarir-a, qarir-ə</i>	<i>qarət-ta</i>	‘cold’

Table 8: Allomorphy of inherited adjectival stems in Alqosh

Most of these morphological alternations are regular reflexes of similar alternations in the ancient Aramaic varieties, i.e. they are very well established in the language.

When foreign adjectives are borrowed, it is usually easy to extract a stem. The Kurdish adjectives borrowed all end in a consonant, and the Aramaic MSG and CPL inflections are simply added, e.g. NKurd *kor* ‘blind’ became in Alqosh *kor-*, inflected for MSG and CPL as *kora* and *korə*, while NKurd *rīnd* ‘good’ became *rand-*, inflected as MSG *randa* and CPL *randə*. The Arabic adjectives, however, have the MSG form ʔaCCaC, which does not work well as a NENA stem (\*\*ʔazraqa for ‘blue’ would have a non-inherited syllabic structure). However, as mentioned in §5.2, a suitable stem could be extracted from the FSG form, *zarqā*, i.e. *zarq-*, which becomes MSG *zarqa*, CPL *zarqə*.

If the stems of these loan adjectives are inflected with FSG *-ta* or *-θa*, however, the stem must be altered, and this makes it much less like the original form in the donor language. For instance, *zarq-* + *-ta* would require an epenthetic vowel, becoming \*\**zarəqta*, likewise *rand-* + *-ta*, would become \*\**ranədta*. There is evidence from both NENA and another Semitic language, Modern Hebrew, of a dispreference for the resyllabification of loanwords, that is, a preference for

takes the same *-a-e-e* inflection as the loanwords rather than inflecting with Aramaic *-ta* (\*\**xarəšta*).

retaining the consonant clusters of the original (Coghill, 2015, 95; Bolozky, 2003). There is also broader cross-linguistic evidence that speakers, when borrowing words that are ill-formed in the borrower language, use adaptation strategies that prioritize preservation (Paradis and Lacharité, 1997). It is likely that this was therefore a motivation for avoiding the Aramaic FSG inflection on such loans. The Arabic FSG inflection *-e* required no resyllabification, as it was purely vocalic, like the inherited MSG and CPL inflections.

If, as is suggested here, the original loans taking this pattern were Arabic, then it was quite natural to apply an Arabic inflection, especially one already present in NENA on many loan nouns. It was not the inflection originally used with the Arabic adjectives of colours and bodily characteristics, but it avoided the merging of MSG and FSG that would have resulted from an adoption of Arabic *-ā* (from *zarqā*) as NENA FSG *\*\* -a*. These adjectives are also frequently used as nouns and it would be extremely unusual in NENA to have one noun for both male and female adult humans, e.g. to have *ʕarja* ‘cripple’ to serve for both a crippled man and a crippled woman (compare, e.g., *sāwa* ‘old MSG, old man’, *sota* ‘old FSG, old woman’, *qurḏāya* ‘Kurdish MSG, Kurdish man’, *qurḏeḥa* ‘Kurdish FSG, Kurdish woman’, showing the obligatory gender distinction).

One issue remains: the motivations in borrowing words of these semantics in the first place. In some dialects Aramaic words remain for at least some of the relevant bodily characteristics, e.g. Qaraqosh/J. Zakho *šahāra* ‘blind’ (cf. Syr *šahhārā* ‘vigilant’) and Qaraqosh *xarša* ‘dumb/mute’ (cf. Syr *xaršā* ‘dumb, deaf’), although in Qaraqosh *xarsa* (< Arab) is also attested. Colours in NENA are, furthermore, predominantly of Aramaic origin. Nevertheless it is striking that, so often, meanings related to bodily characteristics, including disabilities, are represented across NENA dialects by loanwords. There is cross-linguistic evidence that words with negative or emotionally charged connotations are replaced more frequently (including, but not only, by loans) than other words (Vejdemo and Hörberg, 2016; Jackson et al., 2023). It is possible, therefore, that emotions associated with disabilities (both prejudice and sympathy) could be involved in the NENA case.

## 8. Summary and conclusions

A great many NENA dialects have an inflectional paradigm (MSG *-a*, FSG *-e*, CPL *-e* or dialectal variants thereof) which is restricted to a particular set of adjectives. A survey confirms that these are usually loans from Kurdish or Arabic and overwhelmingly belong to the semantic

fields of bodily characteristics (human or animal) and colours. While most of the words taking the inflection across NENA are borrowed from Kurdish, there is strong evidence that the non-inherited inflection FSG *-e* is borrowed from Arabic. It is in Arabic, not Kurdish, that adjectives of these two semantic fields form a coherent group. Furthermore, in a neighbouring Neo-Aramaic variety, Turoyo, adjectives of these fields, among others, take an identical inflection FSG *-e*, as part of a wider adoption of Arabic inflections. While the inflection is not, in Arabic, found precisely on adjectives of bodily characteristics and colours, motivations can be found for adopting it, rather than the actual Arabic ending, in that it enables a distinction between the MSG and FSG forms. Gender distinctions are usually preserved in Neo-Aramaic adjectives and particularly salient for words referring to humans.

While Kurdish loans predominate among the words taking *-a-e-e* across NENA, the inflection could have originated in dialects in closer contact with Arabic, before spreading to other dialects and being applied to loans of other origin. In some dialects of the Nineveh Plain, Arabic loans form a majority of the set, so the inflection may have originated in this region.

The question arose as to why a loan inflection was used for FSG, while the MSG and CPL inflections are inherited. A possible motivation was found in preserving the syllable structure of loans. The inflection *-e* is a vowel, like the other inflections, and does not alter the structure of loan adjectives, many of which have a CVCC- stem (not generally found in inherited adjectives), while the inherited FSG inflections (*\*-ta* and *\*-θa*) would require resyllabification. This reflects a general dispreference for resyllabification of loanwords found in NENA and elsewhere.

This study shows that the borrowing of inflection can be complex and there can be a mismatch between the synchronic picture of lexical borrowing (here, a predominance of Kurdish loans) and its history (an origin in Arabic loans). In this case, the semantics of the words involved, as well as evidence from a neighbouring Aramaic language, were crucial in reconstructing the likely origin and development of a borrowed inflection.

*Address for correspondence:* [eleanor.coghill@lingfil.uu.se](mailto:eleanor.coghill@lingfil.uu.se)

#### ABBREVIATIONS AND SYMBOLS

Arab	Arabic
C.	Christian
CPL	common plural
DIM	diminutive

## BORROWED ADJECTIVAL INFLECTION

F	feminine
FSG	feminine singular
invar.	invariable
J.	Jewish
M.	Muslim
M	masculine
MSG	masculine singular
NKurd	Northern Kurdish/Kurmanji
Pers	Persian
PL	plural
Sor	Sorani/Central Kurdish
Syr	Classical Syriac
**	non-existent, hypothetical form

## REFERENCES

- Akkus, F. 2020. 'Anatolian Arabic', in Lucas, C. and Manfredi, S. (eds) *Arabic and contact-induced change*. Berlin: Language Science Press, 135–158.
- Al-Zebari, A. E. E. 2021. 'The Morphology of Adjectives in the Neo-Aramaic Dialects of 'Aqra'', *Aramaic Studies*, 19, 279–293.
- Al-Zebari, A. E. E. and Khan, G. 2022. 'The Development of Interdental Consonants in the Neo-Aramaic Dialects of the Aqra Region', *Aramaic Studies*, 20, 100–110.
- Askar, K. N. 2014. *Der jüdisch-arabische Dialekt von Arbil und der christlich-neuaramäische Dialekt von 'Ankawa im Vergleich. Untersuchungen zur Phonologie und zur Morphologie des Pronomens*. Masters dissertation, Heidelberg University.
- Askar, K. N. 2020. *Der neuaramäische Dialekt von 'Armoṭa. Untersuchung zur Phonologie und Morphologie*. PhD, Heidelberg University.
- Barsky, E., Furman, Y. and Loesov, S. 2018. 'Two-Hundred-Word Swadesh List for a Modern Aramaic variety (Turoyo)', *Aula Orientalis*, 36(1), 75–110.
- Beṭ-Şawoce, J. 2012. *Xêzne d xabrel/Ordlista Şurayt-Swedi [mêdyoyo]*. Södertälje: Nsibin.
- Beṭ-Şawoce, J., Parisot, J. and Björklund, U. ö. 2010. *Minigrammatik Nyvästysriska-Svenska. Gramatik Nacimo Şurayt-Swedi [Mêdyoyo]*. Boken baserad på M. D. J. Parisots arbete. Södertälje: Nsibin.
- Betzold, V. and Ritter, H. 2012. *Überarbeitung und Digitalisierung des Turoyo—Wörterbuchs von Hellmut Ritter*. Magister, University of Erlangen-Nuremberg, Erlangen.
- Blanc, H. 1964. *Communal Dialects in Baghdad*. Cambridge, Massachusetts: Harvard University Press.
- Bolozky, S. 2003. 'The 'roots' of denominative Hebrew verbs', in Shimron, J. (ed.) *Language Processing and Acquisition in Languages of Semitic, Root-Based, Morphology*. Amsterdam: John Benjamins, 131–146.
- Borghero, R. 2005. *The Neo-Aramaic Dialect of Ashitha*. PhD, University of Cambridge.
- Bulut, C. 2018. 'Iraq-Turkic', in Haig, G. and Khan, G. (eds) *The Languages and Linguistics of Western Asia. An Areal Perspective*. Berlin/Boston: De Gruyter Mouton, 354–384.
- Chyet, M. L. 2003. *Kurdish-English dictionary = Ferhenga Kurmancî-Inglizî*. New Haven: Yale University Press.

- Coghill, E. 2004. *The Neo-Aramaic Dialect of Alqosh*. PhD, University of Cambridge, Cambridge, UK.
- Coghill, E. 2015. 'Borrowing of verbal derivational morphology between Semitic languages: The case of Arabic verb derivations in Neo-Aramaic', in Gardani, F., Arkadiev, P. and Amiridze, N. (eds) *Borrowed Morphology*. Berlin: De Gruyter Mouton, 83–108.
- Coghill, E. 2020. 'Northeastern Neo-Aramaic and language contact', in Grant, A. (ed.) *The Oxford Handbook of Language Contact*. Oxford: Oxford University Press, 494–518.
- Dehghani, Y. 2000. *A Grammar of Iranian Azari: Including Comparisons with Persian*. Munich: LINCOM Europa.
- Erwin, W. M. 1964. *A short reference grammar of Iraqi Arabic*. Washington, D.C.: Georgetown University Press. Reprint, 2004.
- Fassberg, S. E. 2010. *The Jewish Neo-Aramaic Dialect of Challa*. Leiden/Boston: Brill.
- Fox, S. E. 1997. *The Neo-Aramaic Dialect of Jilu*. Wiesbaden: Harrassowitz.
- . 2009. *The Neo-Aramaic dialect of Bohtan*. Piscataway, NJ: Gorgias Press.
- Furman, Y. and Loesov, S. 2016. 'Five Essays in Lexical Interaction between Spoken Arabic and Turoyo', *Zeitschrift für Arabische Linguistik*, (63), 5–18.
- Greenblatt, J. R. 2011. *The Jewish Neo-Aramaic dialect of Amədyā*. Leiden/Boston: Brill.
- Haig, G. and Öpengin, E. 2018. 'Kurmanji Kurdish in Turkey: Structure, varieties, and status', in Bulut, C. (ed.) *Linguistic Minorities in Turkey and Turkic-Speaking Minorities of the Periphery*. Wiesbaden: Harrassowitz, 157–230.
- Hoberman, R. D. 1989. *The Syntax and Semantics of Verb Morphology in Modern Aramaic: a Jewish Dialect of Iraqi Kurdistan*. New Haven, Conn.: American Oriental Society.
- Hobrack, S. 2000. *Der neuaramäische Dialekt von Umra (Dereköyü): Laut- und Formenlehre—Texte—Glossar*. Magisterarbeit, Friedrich-Alexander-Universität Erlangen-Nürnberg.
- Jackson, J. C., Lindquist, K., Drabble, R., Atkinson, Q. and Watts, J. 2023. 'Valence-dependent mutation in lexical evolution', *Nature Human Behaviour*, 7(2), 190–199.
- Jacobi, H. 1973. *Grammatik des thumischen Neuaramäisch (Nordostsyrien)*. Wiesbaden: Steiner.
- Jastrow, O. 1978. *Die mesopotamisch-arabischen Qəltu-Dialekte. Band I: Phonologie und Morphologie*. Wiesbaden: Steiner.
- . 1985. *Laut- und Formenlehre des neuaramäischen Dialekts von Mīdin im Tūr 'Abdīn*. Wiesbaden: Harrassowitz.
- . 1988. *Der neuaramäische Dialekt von Hertevin (Provinz Siirt)*. Wiesbaden: Harrassowitz.
- . 1990. *Der arabische Dialekt der Juden von 'Aqra and Arbīl*. Wiesbaden: Harrassowitz.
- . 2004. 'Jüdisches, christliches und muslimisches Arabisch in Mossul', in Haak, M., De Jong, R. and Versteegh, K. (eds) *Approaches to Arabic dialects. A collection of articles presented to Manfred Woidich on the occasion of his sixtieth birthday*. Leiden: Brill, 135–150.
- Jastrow, O., Talay, S. and Kuzin, w. N. 2024. *Der neuaramäische Dialekt von Midyat (Midjoyo). Band II: Glossar*. Wiesbaden: Harrassowitz.
- Khan, G. 1999. *A Grammar of Neo-Aramaic: The Dialect of the Jews of Arbel*. Leiden: Brill.

- . 2002. *The Neo-Aramaic Dialect of Qaraqosh*. Leiden: Brill.
- . 2004. *The Jewish Neo-Aramaic Dialect of Sulemaniyya and Halabja*. Leiden: Brill.
- . 2008a. *The Jewish Neo-Aramaic Dialect of Urmi*. Piscataway, N.J.: Gorgias Press.
- . 2008b. *The Neo-Aramaic Dialect of Barwar*. (3 vols). Leiden: Brill.
- . 2009. *The Jewish Neo-Aramaic Dialect of Sanandaj*. Piscataway, NJ: Gorgias Press.
- . 2016a. *The Neo-Aramaic Dialect of the Assyrian Christians of Urmi: Volume 1: Grammar: Phonology and Morphology*. Leiden: Brill.
- . 2016b. *The Neo-Aramaic Dialect of the Assyrian Christians of Urmi: Volume 3: Lexical Studies and Dictionary*. Leiden: Brill.
- Khan, G. and Mohammadirad, M. 2024. *Language Contact in Sanandaj*. Berlin/Boston: De Gruyter Mouton.
- Klimiuk, M. (forthcoming) *The Arabic Dialect of Hama, Syria: I. Grammar*. Wiesbaden: Harrassowitz.
- Krotkoff, G. 1982. *A Neo-Aramaic Dialect of Kurdistan. Texts, Grammar and Vocabulary*. New Haven: American Oriental Society.
- Kurdo [Kurdoev], Q. 1960. *Курдско-русский словарь. Ferhenga Kurdî-Rûsî*. Moscow: Gosudarstvennoe izd-vo inostrannykh i natsional'nykh slovari.
- Kuzin, N. forthcoming. 'Adaptation of Arabic and Kurmanji Verbs in Țuroyo', in Meyer, R. and Reintges, C. (eds) *Perspectives on Templatic Morphology*.
- Lambton, A. K. S. 1954. *Persian Vocabulary*. Cambridge: Cambridge University Press.
- Lane, E. W. 1867. *An Arabic-English Lexicon. Part 3 j – ɔ*. London: Williams & Norgate.
- MacKenzie, D. N. 1961. *Kurdish Dialect Studies*. (2 vols). London/New York: Oxford University Press.
- Maclean, A. J. 1895. *Grammar of the dialects of vernacular Syriac as spoken by the eastern Syrians of Kurdistan, north-west Persia, and the Plain of Mosul : with notices of the vernacular of the Jews of Azerbaijan and of Zakhu near Mosul*. Cambridge: Cambridge University Press.
- Maclean, A. J. 1901. *A dictionary of the dialects of vernacular Syriac as spoken by the Eastern Syrians of Kurdistan, northwest Persia, and the plain of Moṣul*. Oxford: Clarendon press.
- Mengozi, A. 2002. *Israel of Alqosh and Joseph of Telkepe. A Story in a Truthful Language: Religious Poems in Vernacular Syriac (North Iraq, 17th century). Vol. I: Text and Glossary*. Lovanii: Peeters.
- Molin, D. 2024. *The Neo-Aramaic Dialect of the Jews of Dohok: A Comparative-Typological Grammar*. Leiden/Boston: Brill.
- Mutzafi, H. 2000. 'The Neo-Aramaic Dialect of Maha Khtaya D-Baz - Phonology, Morphology and Texts', *Journal of Semitic Studies*, 45(2), 293–322.
- . 2008a. *The Jewish Neo-Aramaic Dialect of Betanure (Province of Dihok)*. Wiesbaden: Harrassowitz.
- . 2008b. 'Trans-Zab Jewish Neo-Aramaic', *Bulletin of the School of Oriental and African Studies*, 71(3), 409–431.
- Nakano, A. o. 1973. *Conversational Texts in Eastern Neo-Aramaic (Gzira dialect)*. Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa.
- Napiorkowska, L. 2015. *A Grammar of the Christian Neo-Aramaic Dialect of Diyana-Zariwaw*. Leiden/Boston: Brill.

- Öpengin, E. 2020. 'Kurdish', in Lucas, C. and Manfredi, S. (eds) *Arabic and contact-induced change*. Berlin: Language Science Press, 459–487.
- Paradis, C. and Lacharité, D. 1997. 'Preservation and minimality in loanword adaptation', *Journal of Linguistics*, 33(2), 379–430.
- Payne Smith, J. 1903. *A Compendious Syriac Dictionary. Founded on the Thesaurus Syriacus of R. Payne Smith, D.D.* Oxford: Clarendon Press.
- Qazzaz, S. 2000. *The Sharezoor Kurdish-English Dictionary*. Erbil: Aras Press and Publishers.
- Ritter, H. 1967. *Ṭūrōyo: Die Volkssprache der Syrischen Christen des Ṭūr Ṣabdîn. A: Texte Band I*. Beirut: Orient-Institut der deutschen morgenländischen Gesellschaft.
- Ritter, H. 1990. *Ṭūrōyo: Die Volkssprache der Syrischen Christen des Ṭūr Ṣabdîn. C: Grammatik. Pronomen, „Sein, Vorhanden sein, Zahlwort, Verbum“*. Stuttgart: Steiner.
- Rizgar, B. 1993. *Dictionary Ferheng Kurdish-English English-Kurdish (kurmanji)*. London: M. F. Onen.
- Ryding, K. C. 2005. *A Reference Grammar of Modern Standard Arabic*. Cambridge: Cambridge University Press.
- Sabar, Y. 1976. *Pəşəṭ Wayəhi Bəšallah, A Neo-Aramaic Midrash on Beshallah (Exodus): Introduction, Phonetic Transcription, Translation, Notes, and Glossary*. Wiesbaden: Otto Harrassowitz.
- . 1978. 'Multilingual Proverbs in the Neo-Aramaic Speech of the Jews of Zakho, Iraqī Kurdistan', *International Journal of Middle East Studies*, 9(2), 215–235.
- . 1984a. 'The Arabic Elements in the Jewish Neo-Aramaic Texts of Nerwa and 'Amādiya, Iraqī Kurdistan', *Journal of the American Oriental Society*, 104(1), 201–211.
- . 1984b. *Midrashim ba-Aramit Yehude Kurdista'n la-Parashiyot Va-Yehi, Beshallah ve-Yitro*. (= *Homilies in the Neo-Aramaic of the Kurdistanī Jews on the Parashot Wayəhi, Beshallah and Yitro*). Jerusalem: Israel Academy of Sciences and Humanities.
- . 2002. *A Jewish Neo-Aramaic Dictionary: Dialects of Amidiya, Dihok, Nerwa and Zakho, northwestern Iraq*. Wiesbaden: Harrassowitz.
- Sinha, J. 2000. *Der neuostaramäische Dialekt von Bəşpən (Provinz Mardin, Südosttürkei): eine grammatische Darstellung*. Wiesbaden: Harrassowitz.
- Souag, L. 2020. 'When is templatic morphology borrowed? On the spread of the Arabic elative', *Morphology*, 30(4), 469–500.
- Stoddard, D. T. 1855. 'Grammar of the Modern Syriac Language, As Spoken in Oroomiah, Persiah and Koordistan', *Journal of the American Oriental Society*, 5, 1–180h.
- Talay, S. 2008. *Die neuaramäischen Dialekte der Khabur-Assyrer in Nordostsyrien: Einführung, Phonologie und Morphologie*. Wiesbaden: Harrassowitz.
- Talay, S. 2011. 'Arabic dialects of Mesopotamia', in Weninger, S. (ed.) *The Semitic Languages: An International Handbook*, 909–920.
- Tezel, A. 2003. *Comparative Etymological Studies in the Western Neo-Syriac (Ṭūrōyo) Lexicon. With Special Reference to Homonyms, Related Words and Borrowings with Cultural Signification*. Uppsala: Acta Universitatis Upsaliensis.
- Thackston, W. M. 2006. *Kurmanji Kurdish: A Reference Grammar with Selected Readings*. Unpublished manuscript.
- Vejdemo, S. and Hörberg, T. 2016. 'Semantic Factors Predict the Rate of Lexical Replacement of Content Words', *PLOS ONE*, 11(1), 1–15.

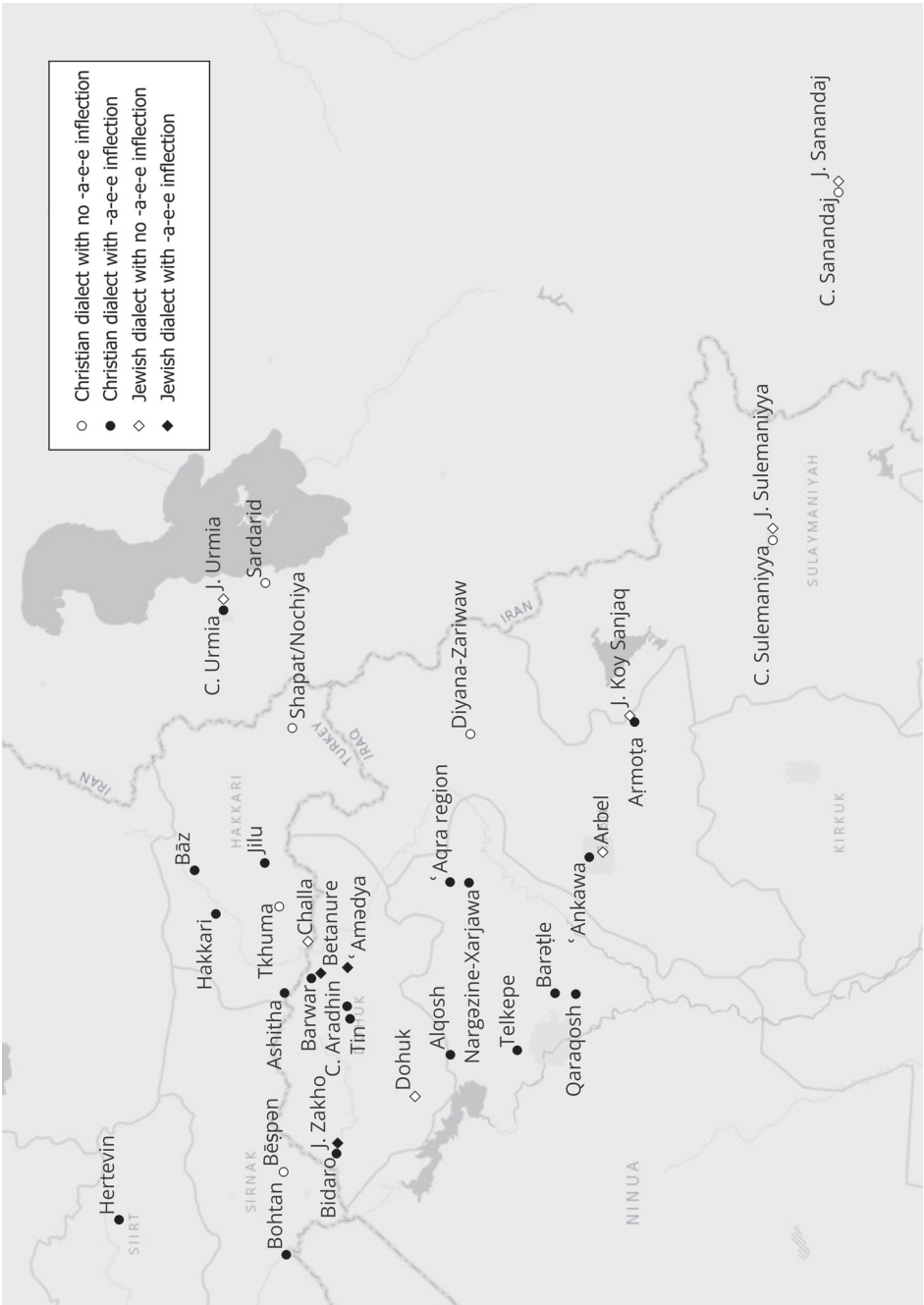
BORROWED ADJECTIVAL INFLECTION

- Waltisberg, M. 2013. 'Ṭuroyo und Arabisch', in Kutty, R., Seeger, U. and Talay, S. (eds) *Nicht nur mit Engelszungen. Beiträge zur semitischen Dialektologie: Festschrift für Werner Arnold zum 60. Geburtstag*. Wiesbaden: Harrassowitz, 353–364.
- Wehr, H. and Cowan, J. M. 1979. *Arabic-English Dictionary. The Hans Wehr Dictionary of Modern Written Arabic*. Edited by J. M. Cowan. 4th edn. Ithaca: Spoken Languages Services.
- Wittrich, M. 2001. *Der arabische Dialekt von Āẓax*. Wiesbaden: Harrassowitz.
- Woodhead, D. R., Beene, W. and Stowasser, K. 1967. *A Dictionary of Iraqi Arabic: Arabic-English*. Washington, D.C.: Georgetown University Press.
- Younansardaroud, H. 2001. *Der neuostaramäische Dialekt von Sārdā:riid*. Wiesbaden: Harrassowitz.



BORROWED ADJECTIVAL INFLECTION

APPENDIX



BORROWED ADJECTIVAL INFLECTION

Meaning of NENA word (and source word unless stated)	Source language	Source word	Telkepe	Qaraqoşh	Baraŋle	Alqoşh	C. Aradhin	Tin	Barwar	Bidaro
albino	Arab	<i>ʔabraš</i>	baʔšo			baʔša				
blue	Arab	<i>ʔazraq</i>	zarqo	zarqa	zarqa	zarqa				
deaf	Arab	<i>ʔaʔraš</i>	ʔaršo	ʔarša	ʔarša					
dumb/mute	Arab	<i>ʔaxras</i>	xarso	xarsa	xarsa					
easy	Arab	<i>sahl</i>	sahlö							
hard/difficult	Arab	<i>šašb</i>	šašbo							
lame/crippled	Arab	<i>ʔaʔraj</i>	ʔarjo	ʔarja	ʔarja	ʔarja				
one-eyed	Arab	<i>ʔašwar</i>								
perplexed/ confused	Arab	<i>b-ħira</i> 'helpless'								
slut	Arab	<i>qahba</i>								
true	Arab	<i>ħaqq</i> 'truth'		mħaqqä						
ugly	Arab	<i>ʔadʕab</i> 'lively; foolish; short and ugly'								
albino; with white mark	NKurd	<i>çûr ~ çwir</i> 'blonde, red-haired; albino'						çarra 'albino'		
bald	NKurd	<i>k'eçel</i>				kaçala		kaçala	kaçala	kaçala
bare-headed	NKurd	<i>ser-qat</i> 'bareheaded', <i>k'ol</i> 'hornless'							sar-kola	
blind	NKurd	<i>kor</i>				kora		kora	çora	
brown	NKurd	<i>sor ~ sohr</i> 'red'								
crooked; crippled	NKurd/Sor	<i>goc</i> 'crippled in one hand'								
deaf	NKurd/Sor	<i>ker</i>				karra		karra	çarra	
dumb/mute	NKurd/Sor	<i>lal, Sor lat</i>						läla	läla	
fresh	NKurd	<i>teř</i>					tarra			
generous	NKurd	<i>merd</i>							marda	
good	NKurd	<i>rind</i>	randa			randa	randa	randa		
green	NKurd	<i>k'esk</i>							kaska	
grey, brown	NKurd	<i>gewr</i> 'whitish, greyish'							gawra 'grey'	
hardworking	NKurd	<i>rêncber</i>				raşbara				
huge, mighty	NKurd-Arab	<i>zexm</i> 'strong, sturdy'							zaxma	
hunchbacked	NKurd	<i>qop</i>							qopa	
lame/crippled	NKurd-Arab	<i>şil</i> 'paralyzed, lame'				şalla				
lame/crippled	NKurd	<i>leng</i> 'lame, limping'							lenga	
miserable	NKurd	<i>p'epük</i> 'weak, feeble, upset'								
naked	NKurd	<i>rüt</i>								
shallow	NKurd (?)	<i>lat</i> 'flat level crag'							laŋta	
squinting	NKurd	<i>qîç</i>								
short/dwarf, tailless/docked	NKurd	<i>qut</i> 'cut, torn, broken off'; 'short'							qutta 'tailless'	
two-coloured, multicoloured	NKurd-Arab	<i>belek</i> 'colourful; with white patches'				balaka 'two-coloured'				
yellow	NKurd/Sor	<i>zer</i>					zara	zara	zara	
green, blue	Pers	<i>nil</i> 'indigo'								
huge	Turkic	<i>yekä</i> 'large'								
dumb/mute	Aramaic			xarša						
hunchbacked	Aramaic									
little (DIM)	Aramaic									
lukewarm	Aramaic									
smooth	Aramaic									
pagan	Aramaic									
fool	?									
lame	?									
sweet, playful	?									

Downloaded from https://academic.oup.com/jss/article/71/1/135/8154982 by Biologibiblioteket user on 16 April 2026

Sources: **Telkepe**: Author fieldwork; **Qaraqoşh**: Khan 2002: 219–220, author fieldwork; **Baraŋle**: V. Al-Saka p.c.; **Alqoşh**: Coghill 2004, author fieldwork; **C. Aradhin**: Krotkoff 1982: 45, glossary, A. Marog p.c.; **Tin**: Author fieldwork; **Barwar**: Khan 2008: 419; **Bidaro**: Author fieldwork; **Hertevin**: Jastrow 1988: 97; **Bohtan**: Fox 2009: 94, glossary; **Hakkari**: Talay 2008: 419; **Ashitha**: Borghero 2005: 332–335; **Bäz**: Mutzafi 2000: 318; **Jilu**: Fox 1997: 63; **C. Urmia**: Khan 2016:

