This paper examines the impact of Arabic on the North-Eastern Neo-Aramaic dialects, a diverse group of Semitic language varieties native to a region spanning Iraq, Turkey, Syria and Iran. While the greatest contact influence comes from varieties of Kurdish, Arabic has also had considerable influence, both directly and indirectly via other regional languages. Influence is most apparent in lexicon and phonology, but also surfaces in morphology and syntax.

1 Current state and historical development

The Aramaic language (Semitic, Afro-Asiatic) has nearly three thousand years of documented history up to the present day. Once widely used, both as a first language and as a language of trade and officialdom, since the Arab conquests of the seventh century it has steadily shrunk in its geographical coverage. Today its descendants, the Neo-Aramaic dialects, only remain in pockets, especially in remoter regions, and are spoken almost exclusively by religious–ethnic minorities. Four branches of the language family exist today: due to diversification these cannot be considered a single language. Indeed, the largest branch, North-Eastern Neo-Aramaic (NENA), which is treated in this chapter, itself consists of many mutually incomprehensible dialects. Its closest relation is Turoyo/Ṣurayt, which is spoken by Christians, known as Suryoye, indigenous to the area immediately west of NENA’s western edge in Turkey. Another member of this branch (Central Neo-Aramaic) was Mlahso, but this was nearly wiped out during the First World War, and its last speaker apparently died in the 1990s.

The NENA dialects are, or were, spoken in a contiguous region stretching across northeastern Iraq, southeastern Turkey, northeastern Syria and northwestern Iran. The majority ethnicity in this region is the Kurds. NENA’s native
speakers are exclusively from Christian and Jewish communities. The Christians belong to a variety of churches: the Church of the East, the Chaldean Catholic Church (which split off from the Church of the East when it came into communion with Rome), and (in fewer numbers) the Syriac Orthodox Church and its uniate counterpart, the Syriac Catholic Church. The Christians’ traditional religious–ethnic endonym is Surāye and they call their language Sūraθ or Sūrət (depending on dialectal pronunciation). In other languages, and sometimes in their own, they identify mainly as Assyrians or Chaldeans.

The Jews are called hudāye or hulāʔe (depending on dialectal pronunciation), and they call their language lišāna deni/nošan ‘our language’ or hulaula ‘Jewishness’. In Israel, where most now live, they are known as kurdím, reflecting their geographical origin in the Kurdish region, rather than their ethnic identity.

Historically, the NENA-speaking Christians usually lived in rural mono-ethnic villages and predominantly practiced agriculture, animal husbandry and crafts. Jews lived in both villages and towns, alongside other ethnic groups such as Kurds. They had diverse professions: tradesmen (pedlars, merchants and shopkeepers), craftsmen, peasants and landowners (Brauer & Patai 1993: 205, 212).

The region to which NENA is indigenous was, until the twentieth century, highly diverse in terms of ethnicity, religion and language. Some of this diversity remains, but a great deal has been lost, due to the persecutions and ethnic cleansing that went on during that century and which were not unknown prior to it. During the First World War, Christian communities in Anatolia, being viewed as a fifth column in league with Russia, suffered murderous attacks and deportations. This affected not only Armenians and Greeks, but also the Sūraθ-speaking Surāye and Ṭuroyo-speaking Suryoye, as well as the many Arabic-speaking Christian communities in the region (the extirpation of some of these is documented in Jastrow 1978: 3–17). By the 1920s, the Hakkari province of Turkey had been emptied of its many communities of Surāye: survivors ended up in Iraq and Iran. Some Sūraθ-speaking villages remained in the neighbouring Şırnak and Siirt provinces, but in the late twentieth century these too were mostly emptied of their inhabitants, during the conflict between the Turkish state and the Kurds.

In Iraq too the twentieth century was far from peaceful for the NENA-speaking communities. After a massacre in the 1930s, a proportion of the survivors of the genocide moved from Iraq to Syria, where they settled along the Khabur river, still in their tribal groups. Others remained in Iraq, in some places in their original

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1The relationship between language and ethno-religious identity was and remains complex. Many Christians belonging to the Syriac churches spoke and continue to speak yet other regional languages, including varieties of Turkish, Armenian and Kurdish.
communities, in other places in mixed communities, where a koiné form of Sūraθ arose. After the founding of Israel, there was a backlash against Jews in Iraq, and almost all Jews left the country for Israel during the 1950s. In Israel their heritage and language were for the most part not appreciated and the language was not passed on to younger generations. Most remaining speakers are now elderly and some dialects have already died out.

From the 1960s onwards, conflicts between Kurdish groups and the Iraqi state resulted in the destruction of numerous northern Iraqi villages, including many Christian ones. Other villages were appropriated by Kurdish tribes. The war in 1990–1991, the international sanctions and the invasion of 2003 and subsequent instability further affected these communities, as they did all Iraqis, and resulted in a dramatic shrinking of the Christian community in Iraq. In 2014, when ISIS captured large swathes of northern Iraq, many Christians and other non-Sunni minorities had to leave their villages overnight. These villages were later re-captured, but, in the absence of extensive rebuilding and due to fears of a recurrence, many inhabitants have not returned and seek to leave the country. The outlook is therefore bleak for these communities and for their language.

2 Contact languages

The main contact language for NENA is – and has been for long time – Kurdish (Iranian, Indo-European), in its many varieties, as Kurds are by far the largest ethnic group in the region as a whole, excepting Iranian Azerbaijan, where Azeris predominate. Kurds have also been politically dominant: during the Ottoman period, Christians and Jews were in the power and under the protection of local Kurdish rulers, the aghas (see Sinha 2000: 11–12; Brauer & Patai 1993: 223). Most NENA speakers in the Kurdish-speaking areas at this time seem to have spoken the local Kurdish dialect. It is not surprising, therefore, that there is more influence from Kurdish than from any other language across most if not all of the NENA dialects, even if its extent varies from dialect to dialect.

2Small communities of Turkic-speaking Turkmens are also found within northern Iraq. Their dialects share features with both Anatolian Turkish varieties and Iranian Azeri (Bulut 2007).

3For such information we rely mainly on statements in grammatical descriptions, where the researcher asked their informants about this. For instance, Hoberman (1989: 9) states, “All my informants who grew to adulthood in Kurdistan report that they spoke fluent Kurdish (Kurmanji)”. Other references for Jews’ competence in Kurdish are: Sabar (1978: 216), Mutzafi (2004: 5), Khan (2007: 198) and Khan (2009: 11); for the Christians see Sinha (2000: 12–13) and Khan (2008: 18).
What role, then, has Arabic played? To summarize: there has been longstand-
ing direct contact with small Arabic-speaking communities in what are other-
wise Kurdish-speaking regions; there has been indirect contact through loans
transmitted via Kurdish and Azeri varieties; finally, there has been intense con-
tact more recently due to the establishment of states with Arabic as the national
language, as well as various other modern developments. In the remainder of
this section, we will go through these three types of contact in turn.

Although the region is not majority Arabic-speaking, there have been long-
standing Arabic-speaking communities in certain parts of it: moreover many of
these were Jewish and Christian, like the NENA-speakers, so one might well
expect more social contacts with them. The Arabic dialects across the region are
overwhelmingly of the qəltu Mesopotamian–Anatolian type (contrasted with the
southern Iraqi/Bedouin gələt type).⁴

Christian qəltu Arabic speakers could be found in the city of Mosul (along-
side qəltu Arabic speakers of other religions) on the edge of the NENA-speaking
Nineveh Plain (also known as the Mosul Plain). They are also present in two
villages on the Nineveh Plain, namely Bəhzâni and Baḥşiqa. Arabic-speaking
Yazidis⁵ also live in these villages, as well as (in Baḥşiqa) some Muslim Arabs
(Jastrow 1978: 24). The Christian NENA speakers of the Nineveh Plain, therefore,
had ample opportunity to come into contact with Arabic. To find more Christian
Arabic-speaking communities in or near the NENA region, we have to travel
quite far, to what are now the Turkish provinces of Şırnak, Siirt and Mardin. In
this region there were many Christian qəltu Arabic-speaking communities liv-
ing in villages and towns until the First World War; fewer afterwards. The settle-
ments with such communities included Āzəḫ (Turkish İdil) and Gazira (Cizre)
in Şırnak province, as well as provincial centres Siirt and Mardin (Jastrow 1978:
1–23). Thus, Christian Arabic speakers were in close proximity to speakers of
NENA dialects in the Bohtan and Cudi regions of Şırnak province, as well as to
speakers of Tūroyo/Șurayt in Mardin Province.

Jewish qəltu Arabic-speaking communities were also found in both northern
Iraq and southeastern Turkey. In Iraq, Arabic was spoken by the Jews of Mosul,
ŶAqra (Kurdish Akre) and Arbil (Erbil; Kurdish Hawler), as well as of the village

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⁴The two types of Mesopotamian–Anatolian Arabic dialects are labelled by scholars according
to the shibboleth of the form ‘I said’: qəltu vs. gələt (Blanc 1964: 5–8). qəltu dialects realize */q/
as /q/, while gələt dialects (such as Muslim Baghdadi), which are Bedouin or Bedouin-influenced,
realize it as /g/. Qəltu dialects also preserve the 1sg inflection –u on the suffix-conjugation
verb. See Talay (2011) for an overview of Mesopotamian–Anatolian Arabic varieties. Note that
some Bedouin influence may be seen in the Muslim qəltu dialects spoken on the plain south
of Mardin (Jastrow 1978: 30).

⁵Elsewhere, Yazidis are Northern Kurdish-speaking.
of Şandor, near Duhok (Hoberman 1989: 9). These all left in the 1950s. Further afield, there were also some Jewish Arabic speakers in Urfa, Diyarbakır, Siverek and Çermik (Jastrow 1978: 4), who also migrated to Israel. There are known to have been contacts between NENA-speaking and Arabic-speaking Jews, through family connections and commerce. Mutzafi (2004: 6) reports such contacts involving the Jewish men of Koy Sanjaq and the Arabic-speaking Jews of Kurdistan. Sabar (1978: 216–217) relates that the Jews of Zakho would visit relatives who had moved to Mosul and Baghdad. On the other hand, Hoberman (1989: 9) stated that the Jews of ʕAmədya knew no more than a few words of Iraqi Arabic.

To sum up, historically, Christian NENA speakers only had direct local contact with Arabic speakers (of their own faith) in Mosul and the Nineveh Plain in Iraq and Şırnak province in Turkey. The NENA-speaking Jews, on the other hand, had Arabic-speaking co-religionists not only in Mosul, but also within Iraqi Kurdistan itself.

While most NENA dialects show greatest influence from the majority languages of the region – Kurdish and (in Iranian Azerbaijan) Iranian Azeri – these also played a role in transferring Arabic influence to NENA. Arabic, as the language of Islam, has had a great influence on Kurdish varieties and Azeri, especially in the lexicon, and many originally Arabic words have been transmitted to NENA via these languages. Sometimes it is difficult to identify the immediate donor of such words, but phonetics and morphology can help (see §3.1.1).

During the twentieth century, with the founding of the states of Iraq and Syria, Arabic became the language of the states that most NENA-speakers found themselves in. They came into contact with it through education, officialdom, military service, radio and trade. Many Christians from the north of Iraq moved south to the major (Arabic-speaking) cities, Mosul, Baghdad and Basra, where, in some cases, they shifted to speaking Arabic, while keeping in close contact with relatives back in the north. By the end of the twentieth century most NENA speakers in Iraq and Syria would have been at ease in Arabic. Naturally these later developments did not affect speakers in Turkey and Iran, who, instead, developed greater competence in Turkish and Persian, respectively. Jewish speakers from Iraq, who had left the region by the end of the 1950s, would have had less exposure to Arabic through these means.

It should be mentioned that there has also been influence from European languages, namely from French (via the influence of the Catholic Church among the Chaldean Catholic communities) and from English (dating to the British Mandate period, as well as the period of globalization from the late twentieth century), though some lexical borrowings from these languages may have been mediated by Arabic.
3 Contact-induced changes in North-Eastern Neo-Aramaic

Contact influence on NENA\(^6\) seems to have arisen mainly through long-term bi- and multi-lingualism, rather than language shift. Indeed, if any shift has taken place, it is more likely to have involved NENA speakers who converted to Islam and shifted to Kurdish.\(^7\) Furthermore, much of Iraq was in earlier times Aramaic-speaking, so it can be assumed that over the centuries a shift took place from Aramaic to Arabic. Some Aramaic substrate features can indeed be seen in Iraqi Arabic dialects, such as a kind of differential object marking (Coghill 2014: 360–361).

Using Van Coetsem’s (1988; 2000) distinctions between changes due to borrowing (by agents dominant in the recipient language) and imposition (by agents dominant in the source language), the contact influences from Arabic attested in NENA are clearly of the first kind, namely borrowing.

Borrowing from Arabic into NENA is of interest particularly as a case of transfer between related and typologically similar languages, as both are Semitic. Like Arabic and other Semitic languages, NENA has in its verbal morphology, and to a lesser extent in its nominal morphology, a non-concatenative root-and-pattern system, complemented by affixes. Thus, with the triradical root \(\sqrt{šql}\), we get such forms as \(k-šāqəl\) ‘he takes’, \(šqəl-lə\) ‘he took’, \(šqāla\) ‘taking’, \(šaqāla\) ‘taker’, \(šqila\) ‘taken’, and so on.

\(^6\)Sources for the main contact languages, if not indicated, are as follows: Iraqi Arabic (specifically Muslim Baghdadi): Woodhead & Beene (1967); Northern Kurdish (i.e. Kurmanji/Bahdini): Chyet (2003). Although Muslim Baghdadi Arabic is not the dialect in closest contact with NENA, as a Mesopotamian dialect it shares much lexicon with more northerly varieties (which do not have a dictionary). The transcription of Northern Kurdish words is based on the conventional orthography, as given in Chyet (2003: xxxix–xl): an IPA transcription is also given. The source for the Christian Alqosh and Christian Telkepe data is the author’s own fieldwork. Other sources are referenced in the text. The author’s own NENA data is transcribed in IPA except as follows: \(č\) [ʧ], \(j\) [ʤ] (equivalent to Arabic \(ǧ\)), \(y\) [j], \(h\) [h], \(x\) between [x] and [χ], and \(g\) between [y] and [x]. Apart from \(h\), consonants with a dot under are the emphatic (velarized/pharyngealized) versions of the undotted consonant; for instance, the symbol \(ð\) represents [ðˤ]. Some dialects have emphasis extending across whole words: such words are conventionally indicated with a superscript cross, e.g. \(+\) sadra (equivalent to \(ṣạḍr\)). The schwa symbol \(ə\) is used to transcribe a NENA vowel that is, in non-emphatic contexts, typically pronounced as [ɪ]. Phonemically contrastive length in vowels is indicated with a macron, e.g. \(ā\) [aː]. The vowels /i/, /e/ and /o/ are usually realized long: [iː], [eː] and [oː]. NENA words from other sources have had their transcription adjusted in some cases to bring them closer to this system: the original transcription may be checked in the referenced sources.

\(^7\)It often happened that Christian girls were (occasionally by arrangement, but often unwillingly) kidnapped by Kurds for the purpose of marriage. Any children would have been considered Kurds.
Arabic influence in NENA is considerable in the realm of the lexicon, but this has very often occurred via other contact languages, rather than directly. (All the contact languages show great influence from Arabic, at least in the lexicon). Direct lexical borrowing or morphological and structural borrowing from Arabic are less common: they are however well attested in the Christian dialects of the Nineveh Plain, as well as some Jewish dialects of the Lišāna Deni branch in northern Iraq, including the dialects of Zakho, Nerwa and ŪAmōdya (Kurdish Amêdî, Arabic al-ʕAmādiyya).

It is difficult to establish with any certainty which contact influences entered the dialects at which time. The earliest Christian and Jewish NENA texts (from the 16th and 17th centuries) already show considerable contact influence from Kurdish and Arabic. The extent of Arabic influence in the early Jewish Lišāna Deni texts (Sabar 1984) is quite surprising. The towns in which these texts originate lie deep in Kurdistan, relatively far from the Arabic speaking part of Iraq. As we have seen in §2, however, Jews in Kurdistan had contacts with Arabic-speaking co-religionists. Some contact influence in the NENA dialects is clearly of recent date, such as loanwords from English, which probably date to the twentieth century. The prospective construction of the Christian Nineveh Plain dialects, which appears to be a structural borrowing from vernacular Arabic (see §3.4), seems to have developed only in the last hundred years or so (Coghill 2010: 375).

By the end of the twentieth century, Arabic was having an immense influence on the speech of Christian Aramaic-speaking communities living in northern Iraq, especially those close to Mosul, such as the town of Qaraqosh. Khan (2002: 9) found that most people from Qaraqosh introduced Arabic words and phrases into their Neo-Aramaic without adaptation. Khan attributes this to the policy of Arabicization in Iraq, which meant that schoolchildren were only educated in Arabic. He found significantly greater influence from Arabic in the younger generation’s speech. In Christian Qaraqosh, as in the neighbouring dialects of Christian Alqosh and Christian Telkepe (author’s fieldwork), a large number of Arabic loanwords have recently been absorbed into the lexicon. Nevertheless, as Khan remarks, “the proportion of Arabic loans that have penetrated the core vocabulary of the dialect and replaced existing Aramaic words are relatively few.” This may, however, not be the case with speakers who have grown up in Arabic-majority cities such as Baghdad. In my admittedly limited experience with such

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8The Jewish manuscripts date to the 17th century, but the texts may have been composed earlier (Sabar 1976: xxxix, xliii–xlvi). The Christian manuscripts date to the 18th century but the composition of the texts can be dated to the 16th and 17th centuries (Mengozzi 2002: 16).
speakers, they use a noticeably greater proportion of Arabic loanwords, even sometimes for basic vocabulary, e.g. Iraqi Arabic ㄅㄠ for ㄇㄠ ‘village’ (heard from a Christian Telkepe speaker who grew up in Baghdad before settling in the US).

3.1 Lexicon

3.1.1 Introduction

All NENA dialects have adopted a large number of loanwords. While Kurdish predominates among these, Arabic loanwords are also common, especially among the Christian dialects of the Nineveh Plain and the Jewish Lišâna Deni dialects.

Khan (2002: 516) makes a useful distinction for Christian Qaraqosh between “(i) loan-words that do not have any existing Aramaic equivalent and (ii) those for which a native Aramaic substitute is still available in the dialect.”\footnote{Note, however, that apparent synonyms are not always identical in meaning. Christian Alqosh ㄕㄢㄆㄠ (Arial ㄕㄢㄆㄠ) is used for a modern glass window, while the inherited lexeme ㄌㄠ is used for the traditional type of window.} These two types seem to reflect two layers of borrowing, an earlier one and a recent one, which, in many cases, is akin to code-switching. Most Kurdish loans belong to the first type, while Arabic loans are most common in the second, though earlier loans do exist. Borrowed Arabic nouns of the second type show little or no adaptation to native morphology, Khan finds. Verbs, however, are always adapted to NENA verbal morphology. Most are slotted into the existing NENA verbal derivations (see §3.1.4).

Khan (2002: 516) remarks that speakers of Christian Qaraqosh are generally aware of the Aramaic alternatives to these Arabic loans and can give them if asked. It could be, however, that subsequent generations will have had little exposure to the older synonyms.\footnote{The fieldwork for the monograph on this dialect was carried out around the year 2000.} Khan notes that some of these older synonyms are themselves loanwords, in some cases from Arabic, but so integrated and long-standing that many speakers may not be aware of this. Examples include the recent Arabic loan ㄆㄠ (Arial ㄆㄠ) and the older loan ㄆㄠ (f. infinitive of NENA ㄆㄠ Q ‘to think’, denominal < Arabic ㄕㄠ ‘estimation’; see §3.1.4), both meaning ‘thought’.

Many loanwords are common to several languages of the region, especially words specific to local culture or to technologies. While the ultimate source can usually be identified, it can sometimes be hard to determine the immediate donor of the loan.
Nevertheless, there is sometimes evidence that can establish the immediate donor. This is the case, for example, for Arabic words ending in the feminine suffix \( \text{tāʔ } \text{marbūṭa} \) (Standard Arabic \(-a(t)\)). The Arabic morpheme is realized with the final /t/ in suffixed forms and in the construct (i.e. followed by a possessor). When borrowed into NENA, the /t/ is not realized in the absolute (isolated) form of the word, as in Arabic, e.g. Alqosh \( \text{sāʕa} \) ‘hour’ (Ar. \( \text{sāʕa} \)). This contrasts with Kurdish, which has the /t/ in all forms, e.g. N. Kurd. \( \text{sa'et} \) [sa'ʕæt] ‘hour’. In some NENA dialects, in certain words, the /t/ appears as \(-at\) in suffixed forms, replicating a pattern in \( \text{qāltu} \) Arabic. Sometimes this leads to back-formations (see §3.3.1). In other items the \( \text{tāʔ } \text{marbūṭa} \) is realized as \(-at\) in all contexts, as it typically is in Kurdish, and this suggests it was borrowed via Kurdish. An example of the latter is Jewish Betanure/Jewish Challa \( \text{ʕaširat} \) ‘tribe’, pl. \( \text{ʕaširatte} \) (Mutzafi 2008: 103; Fassberg 2010: 270). This is borrowed from Northern Kurdish \( \text{ešīret} \) [æʃiːˈɾæt], which borrowed it from Ar. \( \text{ʕašīra(t)} \) ‘tribe’, almost certainly via Persian and/or Ottoman Turkish. Another example, \( \text{ʕādat} \) ‘custom’, is given by Maclean in his grammar of “Vernacular Syriac” (Maclean 1895: 35), where he states that nouns ending in \(-at\) are feminine.\(^{11}\) Fox (2009: 91), writing of Christian Bohtan, also views Arabic loans ending in \(-at\) as having been borrowed via Kurdish. Examples in this dialect are: \( \text{sahat} \) ‘hour’, \( \text{hakowat} \) ‘tale’, \( \text{qəṣṣat} \) ‘story’, \( \text{kəflat} \) ‘family’ (< N. Kurd. \( \text{kuflet} \) [kʊfˈlæt] ~ \( \text{k'ulfet} \) [kʰʊlˈfæt] ‘wife, family’ < Ar. \( \text{kulfa} \) ‘trouble’) and \( \text{məḷḷat} \) ‘nation’ (< N. Kurd. \( \text{milet} \) [mɪˈlæt] < Ar. \( \text{milla} \)). Some of the same examples (\( \text{məḷḷat} \) and \( \text{qəṣṣat} \)) may also be found in Christian \( \text{ʕUmra}: \) Hobrack (2000: 108) takes these to have been borrowed via Turkish, but, given the overwhelming influence of Kurdish in the region, it seems more plausible that they were borrowed via Kurdish.\(^{12}\)

Sometimes there are other indications in the word’s form that it was borrowed via Kurdish: the common NENA word \( \text{šūla} \) ‘work’ derives ultimately from Arabic

\(^{11}\) In Maclean’s dictionary (Maclean 1901: 235), he gives \( \text{ʕādat} \) (orthography adjusted) as the form in the Christian Urmia dialect and as one of the variants in “Alqosh”, by which he means the Nineveh Plain dialects (the other variant being \( \text{ʕāde} \), which, lacking the final /t/, appears to be directly borrowed from Arabic). He gives \( \text{ʕādəta} \), on the other hand, for his “Ashirat” dialect group, which was spoken in “central Kurdistan” (today’s Hakkari province of Turkey). This looks like the back-formations from direct Arabic loans discussed in §3.3.1, which is a little surprising, as one would not expect much direct contact with Arabic in that region. It is, however, a large and diverse group of dialects, and he does not specify in which precise dialect it was attested.

\(^{12}\) The Kurdish forms attested in dictionaries are not always what we would expect as the sources of these forms, however. Thus we find \( \text{ḧekyat} \) [ħækjɑːt] ~ \( \text{ḧikyet} \) [ħɪkˈjæt] ‘story’ and \( \text{qise} \) [qɪˈsæ] ‘story’ (not \( \text{qiset} \)). A variant of the latter ending in /t/, however, is found in a nineteenth-century dictionary cited in Chyet (2003: 490–491).
Northern Kurdish has also borrowed this word, as şuxul [ʃuˈxul] with a variant şûl [ʃuːl]. It is perhaps the latter which is the immediate origin of the NENA word.

The gender in NENA can also suggest the immediate source of a loanword. For instance, qalam ‘pen’ in Arabic has masculine gender, but, loaned into Northern Kurdish as qelem, it may have feminine or masculine gender (Rizgar 1993: 322; Chyet 2003: 478). That qalâma ‘pen’ has feminine gender in certain NENA dialects (e.g. Alqosh; Coghill 2004: 199) suggests that it was borrowed via Kurdish, not directly from Arabic.

It is difficult to date loanwords in a predominantly unwritten language. Nevertheless, we do have written texts in both the Christian Nineveh Plain and the Jewish Lišâna Deni dialects going back at least four hundred years, and even in early texts the proportion of lexemes that were borrowed was high. Arabic loans are conspicuous in both sets of texts. Sabar (1984: 208) found that in a typical Jewish text from Nerwa, 30% of lexemes are ultimately of Arabic origin (whether directly or via another language).

Loanwords may be adapted to varying degrees and in varying ways to the recipient language. §§3.1.2–3.1.5 deal with the ways in which loans in different word classes may be integrated, as well as the ways in which they retain characteristics of the donor language, focusing on Arabic loans.

### 3.1.2 Integration of nouns

Most NENA nouns end in the nominal suffix -a (usually, but not exclusively, masculine nouns) or -tae-tha (feminine nouns). Older borrowed nouns usually have one of these endings, e.g. Christian Alqosh ūmmama ‘paternal uncle’ (Ar. ūmam), ūšâya ‘dinner’ (Iraqi Ar. ūsha) ḥaddâda ‘blacksmith’ (Ar. ḥaddâd), ūšörta ‘early evening’ (Iraqi Ar. ūṣîr) and maʃwalta ‘axe (or similar tool)’ (Iraqi Ar. maʃwal ‘pickaxe’). Even if they do not, they are adapted to NENA stress patterns. Thus Ar. ḥayawān ‘animal’ is borrowed (possibly via N. Kurd. ħeywan [hɐjˈwaːn]) as ħewan in Christian Alqosh, which has penultimate stress (Coghill 2004: 81).

More recent loans, on the other hand, may be used without any such modifications, e.g. Christian Alqosh ūmal ‘thing’ (Ar. ūmal ‘work’), xâm ‘linen’ (Iraqi Ar. ḥâm ‘raw; cotton cloth’), and sāṣa ‘hour’ (Ar. sāṣa f.). They often occur also in their original Arabic plural forms, e.g. Christian Alqosh fallâhîn ‘farmers’ and ṭaʃdâd ‘(large) numbers’.

Many Arabic loanwords come with the Arabic feminine marker tâʔ marbûta (Standard Arabic -a). In qɔltu Arabic dialects this usually has two realizations:
-a after emphatic or back consonants, otherwise a high vowel such as -e or -i.¹³ Such loans in NENA usually also have the same distribution, that is -e (or the dialectal variant -ə), except after an emphatic or back consonant, when it is -a (Telkepe -ɒ), e.g. Christian Alqosh baťalo ‘idleness’ and rawđa ‘kindergarten’ and Christian Telkepe fāda ‘custom’ and qasssp ‘story’ (see also §3.3.1).

Some loans appear to have come from Standard Arabic and have the -a regardless, e.g. Christian Telkepe lahjo ‘dialect’ and madraso ‘school’. Christian Qaraqosh seems to always represent the tāʔ marbūta as -a (Khan 2002: 204).

Borrowed nouns are quite commonly given Aramaic derivational suffixes. For instance, Jewish Azerbaijani amona ‘paternal uncle’ has a borrowed stem, am-, from Ar. ʃamm ‘paternal uncle’ via Kurdish or Azeri, but an Aramaic derivation, -ona, originally with diminutive function (Garbell 1965: 165). An example from the early Lišāna Deni texts is ɣaribūθa ‘foreignness’, from Arabic ɣarīb ‘foreign, strange’ and the NENA abstract ending -ūθa (Sabar 1984: 205).

NENA often adopts the gender of the donor language, where that language has nominal genders (as in the case of Arabic and Northern Kurdish, which both have masculine–feminine gender systems). Thus, the following Christian Alqosh words share the same gender as their Arabic source: ʃašāya ‘dinner’ (m., like Iraqi Ar. ʃaša) and daʔwa ‘wedding party’ (f., like Arabic daʕwa ‘invitation, party’). The loanword ūsɔrtə ‘early evening’ is, however, feminine (as indicated by the NENA feminine ending -ta), while the Arabic source (Iraqi Ar. ʃaʃir) is masculine. In Northern Kurdish, however, it is feminine (ʃir [ʃæˈʃir]), and this may have influenced the gender, which, in turn, motivated the adding of the feminine suffix.

In Christian Telkepe, some Arabic loanwords of the structure *CaCC have, when not suffixed, an epenthetic vowel between the final two consonants. This is absent when a suffix beginning with a vowel is added, i.e. the construct suffix -əd or a possessive pronominal suffix. This follows the rules in the donor language: those Arabic dialects which have the epenthetic vowel (including Baghdadi and some qāltu dialects, such as Mosul) also lose it under similar conditions.¹⁴ Examples include ʃaqəl ‘mind’: ʃaqəl-əd=baxtd [mind-cstr=woman] ‘a woman’s mind’; and ʃarub ‘war’: p-ʃarub-əd=sawästipül [in-war-cstr=Sebastopol] ‘in the Crimean war’. It is interesting to note that the same rule is also found for Arabic loanwords in Kurdish (Thackston 2006: 5).

Occasionally, loanwords are adapted to the native root-and-pattern templates, following the selection of a root. This frequently occurs when the root is also bor-

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¹³See Jastrow (1979: 40) for the conditioned imāla (raising of a-vowels) in the tāʔ marbūta in the Arabic dialect of Mosul, and Jastrow (1990: 70) for the same in the Jewish Arabic dialect of ʃAqra and Arbil.

¹⁴For Baghdadi Arabic, see Erwin (1963: 56–58).
rowed as a verb. Thus we find Christian Qaraqosh ʔəjbona ‘a will, wish’ (Khan 2002: 517), alongside the verb √ʔjb I ‘to please’ (< Ar. √ʕjb IV), by analogy with native words on the pattern CaCCona, e.g. ʔaqdona ‘a burn’ (< √ʔqød I ‘to burn’). Sabar (1984: 205) gives further examples from the early Lišāna Deni texts. More often, however, borrowed nouns are not adapted to native templates, e.g. Alqosh Ḥanafiya ‘tap’ (< Ar. Ḥanafiyya), or only coincidentally follow a native noun pattern (Arabic and NENA share many similar patterns), e.g. Alqosh qahwa ‘coffee’ (< Ar. qahwa), which fits into the common Aramaic pattern CaCCa.

NENA dialects all have a variety of plural suffixes, the most common being perhaps -e (or its dialectal variant -ə). Loanwords, like inherited words, take a wide variety of native plural suffixes, but certain suffixes may be preferred or dispreferred for loanwords, in combination with other factors. For instance in Christian Alqosh feminine loanwords are not attested with the Aramaic plural suffixes -wāθa and -awāθa, while the loan-plural -at (< Ar. -āt) is almost exclusively found with loanwords (Coghill 2005: 347). Recent Arabic loans in Christian Nineveh Plain dialects often occur, unadapted, in their Arabic plural form (see §3.3.1).

3.1.3 Integration of adjectives

Like nouns, loan adjectives may occasionally be adapted to the native root-and-pattern templates, after the selection of a root. For instance, Arabic ʔazraq ‘blue’ (√zrq) is borrowed by Christian Alqosh as zroqa ‘blue’, by analogy with certain inherited colour adjectives of the form CCoCa, such as smoqa ‘red’. Another example is Christian Alqosh ʔadola ‘straight’ (cf. Iraqi Ar. ʔadil ‘straight’ and Christian Qaraqosh which has borrowed it simply as ʔadəl) 15. More often the stem of the loan adjective is borrowed more or less unchanged, as in Christian Alqosh faqira ‘poor’ (Ar. faqīr), coincidentally fitting the inherited adjectival pattern CaCiCa. Adapted loan adjectives tend to take NENA inflection (e.g. f. -ta~θa, pl. -ə). Unadapted loan adjectives usually take no inflection at all, e.g. Christian Telkepe qə́rməzi ‘purple’ (Ar. qirmizi m. ‘crimson’) and ʔasīf ‘thin’ (Iraqi Ar. ʔasīf m. ‘thin, weak’).

Loan-adjectives of a certain group including colours and bodily traits behave in a special manner in some NENA dialects: they take Aramaic inflection for masculine and plural, but a special inflection -ə (identical to the plural ending) for the feminine. This occurs in Christian Qaraqosh particularly with Arabic loan

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15 Attested inherited words of the pattern CaCoCa are all in fact nouns in Christian Alqosh, e.g. ʔalola ‘street’. The pattern CaCūCa might be more expected, being found with several common adjectives, e.g. xamūṣa ‘sour’.

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adjectives, e.g. ṭarša ‘deaf’ (f./pl. ṭaršə, < Ar. m. ṭaṭraš, f. ṭaršāʔ) and zarqa ‘blue’ (f./pl. zarqa, < Ar. m. ṭazraq, f. zarqāʔ), see Khan (2002: 219). It appears to come from a dialectal reflex (-ē) of the Arabic -āʔ feminine ending, found especially with adjectives of these semantic groups. In Christian Alqosh it is also found with loanwords of Northern Kurdish origin, e.g. kačal-a ‘bald’ (f./pl. kačal-ə, from N. Kurd. k’eçel [kʰæˈʧæl]).

In Arabic and Kurdish, adjectives normally follow the head noun, as in NENA. There are, however, a few pseudo-adjectival modifiers borrowed from Arabic which precede the noun in Arabic and are uninflected. These show the same behaviour when borrowed into NENA. One is ṭawwal ‘first’ in Christian Alqosh (a synonym to the inherited adjective qamāya ‘first’), as in ṭawwal-ga ‘the first time’ – compare Arabic ṭawwal marra ‘the first time’. Another is ġer ‘other’ (< Iraqi Ar. yēr), which is attested in Jewish Betanure, e.g. ġer-məndi ‘something else’ (Mutzafi 2008: 105) – compare Iraqi Arabic yēr yōm ‘another day’. Another loanword, xoš ‘good’, invariably precedes the noun, e.g. Christian Telkepe xoš-ʔixālɒ ‘good food’. This seems to originate in Iranian (Persian or Kurdish), but is also common in Iraqi and Anatolian Arabic dialects (as ḥōš), as well as in Turkic varieties (as hoş [hoʃ] or xoş [xoʃ]). In all these languages it precedes the noun, regardless of the usual word order.

3.1.4 Integration of verbs

The borrowing of verbs has been identified as potentially more complicated than the borrowing of other lexemes, due to their tendency to be morphologically complex (Matras 2009: 175). The borrowing of verbs in a Semitic language presents particular issues, due to the unusual root-and-pattern system. In Semitic languages verb lexemes are composed of a root (typically consisting of three – occasionally four – consonants or semi-vowels) and a derivation (also known as “stem”, “form”, “measure”, “binyan” or “theme”). NENA dialects mostly have three triradical derivations (I, II and III) and at least one quadriradical derivation (Q). A borrowed verb will usually be integrated into this system. Three main strategies have been identified for the borrowing of verbs in NENA. One, common also in other Semitic languages (Wohlgemuth 2009: 173–180), is root extraction, whereby from the phonological matter of the source verb a tri- or quadriradical root is selected. This is usually then allocated to a verbal derivation. A

Oddly enough, however, the realization as -ē seems to be restricted to Anatolian qəltu Arabic dialects (where it is stressed, e.g. Āzəḫ lālē ‘dumb’), and not found in the dialects in Iraq (Jastrow 1978: 76). Other words ending in -āʔ have -ē (unstressed) in qəltu Arabic dialects, but only as cases of imāla (raising of a-vowels) conditioned by a neighbouring high vowel.
second is the borrowing of not only the root but also some of the morphology of the Arabic derivation: see below and §3.3.2. A third is the light verb strategy, whereby the loanverb consists of a light verb (with meanings such as ‘become’ or ‘make’) and a (verbal) noun, the latter containing the main semantic content.

The light verb strategy is found in some NENA dialects, but usually with Kurdish or Turkish verbs, which already consist of a light verb plus noun. It is not used to integrate Arabic loanverbs, although sometimes the noun in the predicate ultimately comes from Arabic.

The root-extraction strategy is well attested across NENA dialects and is particularly common with Arabic loanverbs. This is unsurprising, as these already have a root, which in many cases can simply be adopted as it is. For instance, Arabic √ɣlb I ‘to win’ (ɣalaba ‘he won’) is borrowed as Christian Telkepe √qlb I ‘to win’. Sometimes the root is adapted, to conform to the rules of root formation in NENA. For instance, ‘geminate’ roots, where the final two radicals are identical (√C₁C₂C₃, where C₂=C₃), are rare in NENA, and apparently absent altogether in derivation I. Just as inherited geminate roots were converted into middle-y roots (√C₁yC₃), so too are Arabic geminate roots. Thus, Arabic √sdd I ‘to close, stop up’ is borrowed as Christian Alqosh √syd I ‘to close, seal’ (compare inherited √qyr I ‘to be cold’ < √qrr).

Sometimes derivational affixes are adopted as radicals, often replacing a weak radical. For instance, Arabic derivation VIII verb ittafaqa (√wfq) is borrowed by Christian Alqosh as √tfq I ‘to meet’, with the VIII derivational infix -t- reanalysed as a radical. Frequently the root is borrowed not from a true verb but from a (verbal) noun or adjective. Thus, the NENA verb √txmn Q (found, e.g., in Jewish Betanure and Christian Qaraqosh, and as √txml Q in Alqosh) is borrowed from the Arabic noun taḥmin (possibly via Northern Kurdish t’exmîn [tʰæxˈmiːn] ‘supposition, guess’), itself a derivation of Arabic √ḫmn II ‘to guess’ (ḫammana ‘he guessed’). The /t/ of the NENA root is not found in the Arabic root, but can only come from the verbal noun. This is an extension of an inherited Semitic strategy of deriving verbs from nouns. See Sabar (1984; 2002: 52) and Garbell (1965: 166) for more on the creation of verbal roots from non-Aramaic verbs.

The process of integration does not end with the establishment of a root, however. Every verb lexeme must also have a derivation. Tendencies can also be identified for this (Coghill 2015). Arabic loanverbs already have a derivation, but the majority of Arabic derivations have no cognate or functional equivalent in NENA. Where there is a cognate, there are also some formal and functional similarities, and thus such cases are usually loaned into the cognate derivation. Thus, for instance, Arabic √Şd I (Şaddala) ‘to put in order’ is borrowed as Christian Telkepe √Şd I ‘to fix, tidy’ (e.g. mşudollī ‘I tidied’), Telkepe derivation II being the cognate of the Arabic derivation of the same number.
Verbs in Arabic derivations that have no cognate are sometimes allocated to derivations that bear some similarity in form or function to the original derivation. For instance, the NENA derivation most closely resembling Arabic derivation III in form is derivation II (the two share the template -CvCvC-, as opposed to -vCCvC-). Thus Arabic √ḥğr III (ḥāğara) ‘to emigrate’ is borrowed as Christian Telkepe √hjr II ‘to emigrate’ (e.g. mhujera ‘they emigrated’).

Arabic derivations VIII and X may be treated differently: in Christian Iraqi dialects, in particular those of the Nineveh Plain, the derivational morphology may itself be borrowed along with the lexeme (see §3.3.2).

### 3.1.5 Grammatical words and closed classes

NENA has freely borrowed grammatical words such as prepositions, conjunctions and particles of various functions, and some of these are Arabic, though most are Kurdish. In some cases, the original Arabic items may have been borrowed via Kurdish. In Christian Alqosh we find the preposition ṣob ‘towards, near’ (< Ar. ṣawba ‘towards’, cf. Iraqi Ar. ṣōb ‘direction’) and bahās ‘about, concerning’ (< N. Kurd. bēhs [bæhs] ‘discussion (about)’ < Ar. baḥθ). Another example is m-badal ‘instead of’ (< m- ‘from’ + Iraqi Ar. badāl; Coghill 2004: 300). In Jewish Challa we also find m-badal and, in addition, mābayn ‘between, among’ (< Ar. mā bayn; Fassberg 2010: 149, 151). Even in Jewish Arbel, which generally shows less Arabic influence, we find ḏīdd ‘against’ (< Ar. ḏīdd; Khan 1999: 188).

Loan prepositions are not a new phenomenon in NENA, but are already attested in the early Jewish Lišāna Deni texts (Sabar 1984: 208), e.g. Ṣann-īd ‘about’ (< Ar. ʕan ‘about’), ṣōb ‘beside’ (< Ar. ṣawba). By analogy with certain native prepositions, some have been extended with the construct suffix -əd, e.g. Ṣann-īd.

A particle that has been commonly borrowed is bas ‘only; but’ (cf. Iraqi Ar. bass ‘enough; only; but’). This may have been borrowed via Northern Kurdish bes [bæs] ‘enough; but’.

Many dialects, including Christian Alqosh and Christian Telkepe, use kabira to express ‘much’ or ‘very’. This derives from Arabic kabīr ‘big’. In Christian Qaraqosh (Khan 2002: 284–5) they use another Arabic loan for the same meaning: ḥel ~ ḥelə (cf. Iraqi Ar. ḥel ‘with force’).

Other particles commonly borrowed are fa (roughly ‘and so’ in both Arabic and NENA) and lo ‘or; either’ (Iraqi Ar. lō). The adverb bašdēn ‘then; later’ (< Ar. bašdēn) is attested frequently in the Christian dialects of Alqosh, Telkepe and Qaraqosh, despite the presence of an inherited synonym, baθər-dəx [after-how] ‘then; later’.

In Christian Alqosh and Christian Qaraqosh, a particle də- is used with imperatives to give the command a sense of urgency or encouragement. This is already
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attested in the early Jewish Lišāna Deni texts (Sabar 1976: xi). This appears to come from Northern Kurdish *de* [dæ] with the same function. A similar participle (*dē-, də-*) is found in both *qaltu* and Baghdadi Arabic (Jastrow 1978: 310–311).

3.2 Phonology

Two types of phonological contact influences in NENA will be considered here: new phonemes adopted through contact, and allophonic alternations influenced by contact.

3.2.1 New phonemes

NENA dialects have gained several new phonemes through language contact. These phonemes have entered the dialects via loanwords that were not fully adapted to Aramaic phonology. Some new phonemes are restricted to loanwords, while others have developed also in native words, through processes such as combination (creating affricate phonemes) and assimilation. As might be expected, Kurdish loanwords are responsible for the majority of the borrowed phonemes, but Arabic has also played a role, especially in those dialects closest to the Arabic-speaking region, i.e. the Christian dialects of the Nineveh Plain. The examples given below are from the Christian Alqosh dialect of this group (Coghill 2004: 11–25, with adapted transcription).

Some of the borrowed phonemes in NENA dialects have been introduced by both Kurdish and Arabic loanwords. These include /j/ [ʤ] and /č/ [ʧ]. The latter is not found in Standard Arabic, but is found in Mesopotamian dialects of Arabic. The phoneme /f/ seems to be borrowed predominantly from Arabic, although this phoneme also exists in Kurdish. Examples of loanwords with these three phonemes are: *ješ* ‘army’ (< Iraqi Ar. ǧēš), *jullə* ‘clothes’ (< N. Kurd. *cil* [ʤɪl]), *čārək* ‘quarter’ (< N. Kurd. *čarêk* [ʧɑːˈreːk]) √čyk I ‘to pierce’ (< Iraqi Ar. √čkk I), and *faqira* ‘poor’ (< Ar. *faqir*).

The phoneme /č/ is also found in certain native Aramaic words, as a result of the combination of /t/ and /š/, e.g. *čeri* in *čeri qamāya* ‘October’ (< *tšeri, cognate with Christian Qaraqosh *təšri* and CSyr *tešri ~ tešrin* ‘Tishrin’).

The Arabic phoneme /ð̣/ [ðˤ] is found in many loanwords in Iraqi NENA dialects, e.g. √ḥð̣r III ‘to prepare’ (< Iraqi Ar. √ḥð̣r II). In most Mesopotamian dialects of Arabic in contact with NENA, /ḍ/ is rarely found, as it has merged with /ð̣/. Nevertheless, one loanword in Alqosh and Qaraqosh has the /ḍ/ phoneme, namely *ʔoḍa* ‘room’, which originally comes from Turkish *oda*. While Turkish is not considered to have emphatic consonants, it does have vowel harmony, and
words with back vowels have been interpreted as having emphatic consonants, when borrowed into qəltu (and other) Arabic dialects (Jastrow 1978: 51–52). Thus the qəltu dialect of Qartmin, in which *ḍ and *ð̣ have merged as /ð̣/, also has ʔōḍa ‘room’ (Jastrow 1978: 70). NENA ʔoḍa was borrowed from Turkish either via a local Arabic variety or directly, in which case its speakers must have also interpreted back-voweled Turkish words as emphatic.17

The pharyngeals /ʕ/ and /ḥ/, which in most inherited Aramaic lexemes have shifted to /ʔ/ and /x/ respectively, have been reintroduced through loanwords from both Arabic and the Classical Syriac used in the church. Examples for /ʕ/ are: ʔamma ‘uncle’ (< Ar. ʕamm), √ʕyš I ‘to live’ (< Ar. √yyš I), ʔoddānā ‘time’ (CSyr ʕeddānā). Examples for /ḥ/ are: √jrḥ I ‘to get injured’ (< Ar. √จรح I ‘to injure’), √ḥð̣r III ‘to prepare’ (< Iraqi Ar. √أجرح II), mšiḥa ‘Christ’ (< CSyr mšiḥā), and haṭṭāya ‘sinner’ (< CSyr ḥṬṭāyā). In some Arabic loans, however, /ʕ/ has shifted to /ʔ/, perhaps indicating that they belong to an earlier stratum, e.g. Christian Alqosh daʔwa ‘wedding party’ (Ar. daʕwa). Some cases of /ʕ/ and /ḥ/ in Alqosh, as in other NENA dialects, are original: the shift to /ʔ/ and /x/ respectively has been blocked in certain phonetic environments, particularly in the neighbourhood of emphatic consonants or /q/, e.g. rahūqa ‘far’ (< *rahḥūqua), see Khan (2002: 40–41). Furthermore, /ḥ/ has arisen in the third person singular possessive suffixes, as a shift from original *h. This appears to be a strategy of disambiguating these suffixes from the phonetically similar nominal endings (see Coghill 2008: 96–97).

The voiced uvular fricative was an allophone of the voiced velar stop /g/ in earlier Aramaic. In NENA it merged with *ʕ and shifted to a glottal stop /ʔ/. Like the pharyngeals, it has been reintroduced into NENA through loanwords from both Arabic and Classical Syriac, e.g. √ġlb I ‘to win, defeat’ (< Ar. √גלב I) and paḡra ‘body’ (< CSyr paḡra). It has also arisen in native words through regular assimilation of /x/ to a following voiced consonant. In the case of the verb √ġzd I ‘to reap’ (< *xzd < *xṣd < *ḥṣd), the voiced allophone, originally only found in certain forms, has spread by analogy throughout the paradigm (Coghill 2004: 20).

The cases of /č/, the pharyngeals, and /ġ/ show how new phonemes may arise through borrowing, while being assisted by internal developments.

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17 Northern Kurdish also has this word, but Chyet’s (2003) dictionary only gives variants without emphasis (e.g. ode), although Iraqi Kurdish dialects do often preserve emphasis in Arabic loanwords (Chyet 2003: viii; see also Öpengin, this volume).
3.2.2 Allophonic sound alterations

Some NENA dialects, such as Christian Alqosh (Coghill 2004: 27), exhibit word-final devoicing of consonants, e.g. mjāwəb [mˈdʒæup] ‘answer!’ (cf. mjawobsa ‘to answer’ with [b]) and qapağ [ˈqɑpɐχ] ‘lid’ (cf. qapağəd-dəstiθa ‘saucepan lid’, with [ʁ]). There is also a strong tendency towards word-final devoicing in both qoldt Arabic (Jastrow 1978: 98) and the Kurdish dialects of Iraq (MacKenzie 1961: 49), so it seems to be an areal feature (see also Akkuş, this volume, on contact-induced devoicing in Anatolian Arabic, and Lucas & Čéplö, this volume, on the same phenomenon in Maltese).

3.3 Morphology

NENA dialects have borrowed a variety of morphemes from regional languages via lexical loans. As these become more integrated into the language, they may be found not only in the original loanwords but also with new words, including inherited lexemes. NENA being a Semitic language, it is possible for morphological borrowings to be a templatic pattern rather than a single phonetic chunk: indeed, some verbal derivational patterns have been borrowed from Arabic, as will be shown in §3.3.2.

3.3.1 Nominal inflection

A grammatical suffix that has been borrowed by some Iraqi dialects is the Arabic feminine sound plural suffix -āt. In Christian Alqosh and Christian Qaraqosh, as well as the Jewish Lišāna Deni dialects of northern Iraq, it has been integrated into the native morphology: as these dialects have penultimate stress in nouns, the suffix itself is not stressed in these dialects as it is in Arabic (Coghill 2004: 272–273; 2005; Khan 2002: 193–194). Accordingly it has also been shortened to -at, e.g. Christian Alqosh makina ‘machine’, pl. makinat, maḥallo ‘town quarter’, pl. maḥallat. In Alqosh and Qaraqosh it is only attested with feminine nouns. It is not, however, restricted to Arabic loans, but has been extended to other foreign words, e.g. Alqosh poşiya ‘turban’ (N. Kurd. p’oşi [pʰoːʃiː]) pl. poşiyat. In Alqosh and Qaraqosh it is even found with some native Aramaic words, e.g. Christian Qaraqosh ṭarnuwa ‘rabbit’, pl. ṭarnuwat ‘rabbits’; ṭilāna ‘tree’, pl. ṭilānat ‘trees’.

In some words, probably borrowed during the more recent and more intense period of contact with Arabic, the original stress and length of the ending is preserved, e.g. Christian Alqosh holā́t ‘halls’ and Christian Qaraqosh badlā́t ‘suits’ and gadlā́t ‘tresses’ (Khan 2002: 194). (Note, however, that the latter is an Aramaic word). This is always the case in Telkepe, e.g. jəddə̀v ‘midwife’, pl. jəddā́t
and traktar ‘tractor’, pl. traktarā́t. Note that in Telkepe, as in Arabic, this plural is sometimes found with masculine nouns, e.g. mez (m.) ‘table’, pl. mezā́t or primuz (m.) ‘primus stove’, pl. primuzā́t.

Apart from the Christian Nineveh Plain dialects, -at is attested regularly as a plural in some of the Jewish Lišāna Deni dialects, spoken further to the north. As mentioned in §2, these Jewish communities would have had contact with spoken Arabic through connections with their co-religionists.

In the modern Jewish dialect of Zakho, -at is used with the following types of nouns (Sabar 2002: 44–45): feminine Arabic loans ending in -a or -e (i.e. the dialectal version of the Arabic feminine suffix tāʔ marbūta; see §3.1.2), some nouns of Kurdish origin ending in -e (perhaps by analogy with Arabic loans ending in -e), and nouns ending in certain borrowed suffixes, namely the diminutive suffix -ka (f. -ke) borrowed from Kurdish, the professional suffix -či borrowed from Turkish, and the ending -o. It is also one of the two most common plurals for European loanwords, e.g. † pākētat ‘packets (of cigarettes)’ (Sabar 1990: 57). This suggests it is particularly associated with loanwords, regardless of origin. In Jewish Duhok (also Lišāna Deni), however, it is attested with a native Aramaic word, raʔolat ‘brooks’ (Sabar 2002: 45). It seems therefore that the morpheme has been extended far beyond its original distribution.

The plural -at does not seem to have spread to all Lišāna Deni dialects, however: it is not mentioned in the grammars of Jewish Challa (Fassberg 2010) and Jewish Betanure (Mutzafi 2008). It has, nevertheless, an early origin: it is found in the late seventeenth-century manuscripts originating in the towns of ūAmādyā and Nerwa. I found one example of it in the grammar of the modern ūAmādyā dialect (Greenblatt 2011: 70), namely maymonke (f.) ‘monkey’, pl. maymonkat, probably because it has the Kurdish diminutive suffix (see above).

Across the border in Turkey, another Christian dialect has this plural ending, that is the dialect of ūUmra (Turkish name Dereköyü), close to the town of Cizre. In this region of Turkey there are or were several Arabic-speaking communities, including Christian Arabic speakers in Cizre (until the First World War; see Jastrow 1978: 17), so it is not surprising that there should be influence from Arabic. In this dialect, -at is mostly attested with borrowed feminine nouns ending in -e, though there are also a couple ending in -a, both masculine and feminine (Hobrack 2000: 114). The majority have the Kurdish diminutive suffix -ka (f. -ke) mentioned above in relation to Jewish Zakho.

In the Christian dialects of Iraq, as spoken currently, it is common to use Arabic words with their original plural morphology, probably because almost all speakers speak Arabic with native or near-native competence and many con-
cepts are more familiar or only available to them in this language. Thus, apart from the -āt plural, we also find the masculine sound plural suffix -in and the non-concatenative broken plurals, e.g. Christian Alqosh fallāh-īn ‘farmers’, and barāmil ‘barrels’ (sg. barmīl) (Coghill 2004: 273). We even find such examples in the late seventeenth-century manuscripts written in Jewish Lišāna Deni dialects, e.g. ḡāfilīn ‘fools’ and ʔarwāḥ ‘spirits’ (Sabar 1984: 205–206).

Many Arabic loanwords come with the Arabic feminine marker tāʔ marbūţa, either the qaḻtu Arabic variants or the Standard Arabic -a (§3.1.2). In some dialects of the Nineveh Plain, the tāʔ marbūţa is borrowed along with its connecting allomorph -at. In Arabic the /t/ is only realized in construct state (as the head of a genitive phrase) or before possessive suffixes.

In Christian Qaraqosh the isolated form of such loans ends in -a, like inherited masculine nouns, although the gender is feminine (as in the source words). When possessive suffixes are added, however, the /t/ is realized, as in Arabic (Khan 2002: 204–206). Thus Qaraqosh badla ‘suit of clothes’ (cf. Iraqi Arabic badla) becomes badl-ətt-əḥ [suit-f-3sg.m] ‘his suit of clothes’. The gemination of the /t/ is not found in the Arabic forms, but can be explained as follows. In Mosul Arabic, unlike in many Arabic dialects, the tāʔ marbūţa takes the stress, when any possessive suffix is added: bāșali ‘onion’, baṣal-ə́t-ak [onion-f-2sg.m] ‘your onion’ (Jastrow 1983: 105). It is likely that the /ə/ vowel in the NENA morpheme -ətt- imitates the vowel of the Arabic morpheme. The stress pattern fits well into NENA, which has penultimate stress. However, in NENA /ə/ is dispreferred in an open syllable, especially when stressed. The /t/ is probably geminated in order to close the syllable so as to conform to this preference. This mechanism has parallels elsewhere in NENA.

These same loanwords take the Arabic plural -at discussed above. Even some Aramaic feminine words in Christian Qaraqosh have acquired both -ətt- and -at, e.g. ʔarnuwa (f.) ‘rabbit’, ʔarnuwəttəḥ ‘his rabbit’, ʔarnuwat ‘rabbits’. But -ətt- is also found with some Aramaic feminine words that have native plurals, e.g. bira (f.) ‘well’, birāθa ‘wells’, birəttəḥ ‘his well’. In exceptional cases -ətt- may also be used with feminine words with the Aramaic f. ending -ta-θa, e.g. šwiθa ‘bed’, šwiyāθa ‘beds’, šwiθəttəḥ ‘his bed’. It seems, therefore, that in Qaraqosh this is now a morphological borrowing independent of the loanwords it was originally borrowed with.

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18 Younger NENA speakers who have grown up in the Kurdish-controlled region since 1991 may have less competence in Arabic, however.

19 Khan (2002: 206) gives two other possible derivations: a combination of Arabic f. -at and Aramaic f. -ta (though the latter is not found on the isolated form) or the NENA independent genitive particle did-. The explanation above seems to me to be simpler, however.
In Christian Telkepe, vernacular Arabic nouns with tāʔ marbūṭa are borrowed ending in either -ə or -ɒ, matching the two realizations of the tāʔ marbūṭa in qəltu Arabic (§3.1.2). As in Qaraqosh, these nouns retain their feminine gender in Telkepe. They also have the -ətt- allomorph before possessive suffixes, e.g. 之乡 (f.) 'health', 之乡ṭux [之乡-ətt-ux health-F-2SG.M] 'your (m.) health'; .reserve (f.) 'room', (expect [expect-ətt-e room-F-3SG.M] 'his room'. The suffix seems to be used productively with Arabic words, as and when they are used. One example in Telkepe is not borrowed from a feminine with tāʔ marbūṭa, namely 之乡 (f.) 'tea' (cf. Iraqi Ar. 之乡 (m.)). This word is, however, feminine in Northern Kurdish (之乡 [ʃaːj]), whence it may have been borrowed.

Christian Alqosh seems to have gone a step further, creating back-formations from the suffixed forms. Thus the unsuffixed forms also have -ətt-, e.g. 之乡ṭṭa ‘health’, 之乡ṭṭa ‘story’ and 之乡ṭṭa ‘religious community’. When the plural suffix (always the feminine plural -yāθa) is added, one /t/ alone is preserved, suggesting that the second is now analysed as part of the feminine singular ending -ta, while -ət- is analysed as part of the stem: 之乡ṭṭa ‘story’, 之乡ṭṭa ‘stories’; 之乡ṭṭa ‘community’, 之乡ṭṭa ‘communities’.

Similar forms are also attested in Jewish Challa (Lišāna Deni), but without the gemination of the /t/, e.g. 之乡ṭṭa ‘ethnic group’, 之乡ṭṭa ‘custom’ (Fassberg 2010: 52). Rather than explaining the /t/ as originating in the Arabic suffixed stem, as I have done above, Fassberg suggests that the /t/ is present because the words were borrowed via (Northern) Kurdish, which realizes the tāʔ marbūṭa as a final /t/ even when the noun is unsuffixed: 之乡t [miˈlæt] and 之乡t [ʃaːdæt] (Chyet 2003: 387). Khan (2002: 206) also suggests this route for Qaraqosh. This explanation would not explain why the unasffixed forms in Qaraqosh do not end in /t/, nor why the preceding vowel in all these dialects is /ə/ rather than /a/ (the nearest phonetic equivalent to Kurdish 〈e〉). In fact, there are some clear loans of Arabic words via Kurdish which end in -at in the singular unsuffixed form (see §3.1.1). The Kurdish route would furthermore not explain the close association in Qaraqosh of this morpheme with words taking an -at plural, which seems to have been borrowed directly from Arabic. It seems more likely, therefore, that the Qaraqosh, Telkepe, Alqosh and Challa feminine nouns with suffixed -ət- have been borrowed directly from Arabic and are influenced by the Arabic suffixed forms, which have a similar form.

### 3.3.2 Verbal derivation

The NENA verbal system consists of both synthetic and analytic verb forms. The synthetic verb forms are formed from two stems, the Present Base and the Past Base, e.g. Christian Alqosh 之乡-ί [ind-take.pres-3pl] ‘they take’ and 之乡-ε
[take.PAST-3PL] ‘they took’. Analytic forms involve auxiliary verbs or verboids combined with non-finite verb forms, such as the infinitive or participles, or, less often, with finite verb forms. Like Arabic, NENA has a verbal system based on the root-and-pattern system. As also in Arabic, a verb lexeme typically has a triconsonantal root and a verbal derivational class (see §3.1.4). While Standard Arabic has ten fairly common triradical verbal derivations, NENA dialects typically have only three or four inherited verbal derivations.

Morphological loans may be found in the verbal system. Christian NENA dialects of the Nineveh Plain and elsewhere have partially borrowed Arabic verbal derivations along with borrowed verb lexemes. NENA and Arabic have some cognate verbal derivations and the relationships are relatively transparent. Most Arabic loanverbs are allocated to a NENA derivation that is formally or functionally similar to the donor derivation (and often cognate). See §3.1.4 for discussion of this. In the case of Arabic verbal derivations VIII and X, however, this is not possible, as no NENA derivations have the characteristic affixes -t- and (i)st-. In some cases, the affix may instead be analysed as a radical (§3.1.4). In others, loanverbs in these derivations are borrowed with this derivational morphology, i.e. with the affixes. This has, in effect, created new derivations, the Ct- and St-derivations.

Table 1 gives all hitherto attested examples of verbs in the new derivations from Christian Telkepe, but additional verbs are attested in Christian Qaraqosh (Khan 2002: 130).

Table 1: Arabic loanverbs borrowed into the new NENA derivations

<table>
<thead>
<tr>
<th>NENA verb</th>
<th>Source verb</th>
</tr>
</thead>
<tbody>
<tr>
<td>√ḥrm Ct- ‘to respect’</td>
<td>Ar. √ḥrm VIII (iḥtarama)</td>
</tr>
<tr>
<td>√xlf Ct- ‘to differ’</td>
<td>Ar. √ḫlf VIII (iḫtalafa)</td>
</tr>
<tr>
<td>√ḥfl Ct- ‘to celebrate’</td>
<td>Ar. √ḥfl VIII (iḥtafala)</td>
</tr>
<tr>
<td>√ʕml St- ‘to use’</td>
<td>Ar. √ʕml X (istaʕmala)</td>
</tr>
<tr>
<td>√ɣll St- ‘to exploit’</td>
<td>Ar. √ɣll X (istaɣalla)</td>
</tr>
</tbody>
</table>

When Arabic verbs in derivations VIII and X are borrowed as they are, their characteristic consonantal clusters -Ct- and -st- are preserved and not broken up by an epenthetic vowel, even if this results in a syllabic structure that is dispreferred in the NENA dialect (such as a stressed short vowel in an open syllable), e.g. k-maḥṭaraṃ [IND-respect.PRES.3SG.M] ‘he respects’. This may be in order to preserve a salient characteristic of the original Arabic forms.
The vowel pattern in these derivations is, on the other hand, variable, even within the speech of one speaker. For instance, in the Present Base of the St-derivation, we find məstaCaCC-, məstaCCəC- and məstaCəCC- (e.g. məstaʕaml-, məstaʕməl-, məstaʕəml- ‘use’) as variants of one and the same form. What are the reasons for this variability? Firstly, Arabic derivations VIII and X are morphophonemically more complex than the native Aramaic derivations. The consonant clusters bring the necessity of epenthetic vowels: this leads to at least one short vowel in an open syllable, which is disfavoured in Telkepe. Where the epenthetic vowel is placed is still optional and in flux. Secondly, there is a conflict between the characteristic vowels of the Iraqi Arabic source and the vowels typical of Aramaic derivations. Sometimes the former may be more influential and sometimes the latter.

The new Ct- and St- derivations in NENA have not been extended to inherited roots nor used productively, unlike some Arabic derivations in Western Neo-Aramaic. See Coghill (2015) for full details of the new derivations found in NENA, Western Neo-Aramaic and other Neo-Aramaic varieties.

3.4 Syntax and pattern borrowings

A syntactic borrowing attested only in the Christian Nineveh Plain dialects is the grammaticalization of a prospective auxiliary (and, as a further step, uninflected particle) on the model of the vernacular Arabic prospective future particle raḥ-, which is attested in nearby Mosul Arabic (author’s fieldwork), as well as more widely across the Syrian and Mesopotamian Arabic dialects (Jastrow 1978: 304). Example (1) shows the Neo-Aramaic construction (with the particle) and example (2) shows the Arabic construction.20

(1) Christian Telkepe NENA (author’s fieldwork)

زي-نابل-ن

PRSP-fall.PRES-3SG.F

‘She’s going to fall.’

(2) Christian Mosul Arabic (author’s fieldwork)

غاه-تقة

š-šagaɣa!

PRSP-fall.IMPF.3SG.F DEF-tree

‘The tree’s going to fall!’

20 All glosses in the present chapter are the author’s own.
In both cases the gram has developed from a verb ‘to go’ in a form with imperfective or imperfective-like functions. Such a development is of course extremely common in the world’s languages and does not need a contact explanation. Nevertheless, there is evidence that contact played a role. The construction is only found in NENA dialects close to the Arabic-speaking zone of Iraq, i.e. near to Mosul. Furthermore, the most mature versions of the gram (formally and functionally) are found in the villages closest to Mosul. The gram seems to have developed only in the last 100 years or so, as it is not attested in texts or mentioned in grammars of those dialects before then. See Coghill (2010; 2012) for more details.

NENA shares a number of idiomatic expressions with neighbouring languages. Among these are formulae used regularly in specific contexts, such as telling a story or expressing thanks, congratulations or condolences. One that is widespread in NENA dialects, as well as several neighbouring languages, is the opening formula to a fictional story, which begins ‘there was (and) there wasn’t’: see also Chyet (1995: 236–237). It is attested in various dialects of NENA, Ṭuroyo, Kurdish, Azeri, Persian and Arabic, e.g.:

(3)  

a. Christian Alqosh NENA (Coghill 2009: 268)  
ʔəθwa⇒w laθwa

b. Christian Bohtan NENA (Fox 2009)  
ətwa lətwa

c. Akre Kurdish (MacKenzie 1962: 288)  
hebo nebo [hæˈboː næˈboː]

d. Iranian Azeri (Garbell 1965: 175)  
(bir) värmiš (bir) jóxmuš

e. Christian Bəḥzāni Arabic (Jastrow 1981: 404)  
kān w ma kān

---

21 In the case of the Nineveh Plain dialects, it originates in a verb that originally had perfect aspect, e.g. zil-ən ‘I have gone’, possibly with the implication of ‘I am on my way’. It had also acquired a meaning of imminent future ‘I am about to go’, in effect ‘I am in the process of just leaving’, hence “imperfective-like functions”.

22 This is a variant (along with kān ma kān, attested in Palestinian Arabic) of the well-known formula kān yā ma kān ‘once upon a time’. While kān w ma kān clearly means ‘there was and there was not’, kān yā ma kān has been interpreted in different ways both by scholars and native speakers. Taking yā ma in its meaning of ‘how much’, it can be understood as ‘there was, how much there was!’ Alternatively, the ma is understood as a negator, as is found in the formula in the other languages. See Lentin (1995) for a discussion of kān yā ma kān and similar expressions.
When such formulae are shared by multiple regional languages, it is difficult to say for certain which language NENA borrowed them from. Kurdish is usually the assumed donor, simply because it is the language most in contact with NENA and which has had the greatest influence at all levels. Given, however, that many speakers knew other regional languages as well, they may have heard such expressions in several languages.

Proverbs are another area in which there are shared expressions across the regional languages (Segal 1955; Garbell 1965: 175; Chyet 1995: 234–236). An example is ‘He who knows, knows. He who doesn’t know, says “a handful of lentils”’. This stems from a folktale and means something like ‘looks can be deceiving’ (Chyet 1995: 235–236). It is attested in Kurdish, Iraqi Arabic, and NENA, as illustrated in (4–5).

(4) Iraqi Arabic (Chyet 1995: 235)
\[
\text{il-yidrī impf.3sg.m yidrī impf.3sg.m w-il ma yidrī and-rel neg yidrī impf.3sg.m gað̣bit handful.cs ſaadas yadas}
\]
‘He who knows knows, he who doesn’t know (says) “a handful of lentils”’.

(5) Jewish Zakho NENA (Segal 1955: 262, adapted transcription)
\[
\text{aw 3sg.m d-k-iʔe ind-know.pres.3sg.m k-iʔe ind-know.pres.3sg.m aw 3sg.m d-lá rel-not}
\]
‘He who knows knows, he who doesn’t know looks at a handful of lentils.’

Sabar (1978), who lists proverbs used by the Jews of Zakho, states also that many proverbs were not translated into NENA, but used in the original language, whether Kurdish or Arabic.

There are also some areas of structural convergence in the region’s languages, where the donor language cannot be definitely identified. For instance, all the languages (NENA, Sorani, Northern Kurdish, Persian, Turkish, Azeri, Iraqi Turkmen and qəltu Arabic) have enclitic copulas, as illustrated in (6–8).

(6) Akre Kurdish (MacKenzie 1961: 175)
\[
\text{ew 3sg.m kî-e who=prs.cop.3sg [æw ʻkiːæ]}
\]
‘Who is that?’
Another shared structure is the use of finite subordinate clauses in subjunctive mood, rather than infinitives, as complements. In earlier Aramaic varieties, such as Classical Syriac, both were used (Nöldeke 1904: 224–226), but in NENA only finite verbs are used, as in example (9).

(9) Christian Telkepe NENA
   k-əbə d-āxə
   IND-want.pres.3sg.m comp-eat.pres.3sg.m
   ‘He wants to eat.’

Finite verbs in an irrealis mood are also used in such subordinate clauses in qəltu (and other vernacular) Arabic (e.g. Jastrow 1990: 65), Northern Kurdish (MacKenzie 1961: 208–209), Sorani (MacKenzie 1961: 134–135), Iraqi Turkmen (Bulut 2007: 175–176), and Iranian Azeri (Fariba Zamani, personal communication). The development in Turkic is attributed to Iranian influence (Bulut 2007: 175–176). This parallels the loss of the infinitive and its replacement by finite verb forms in the Balkan Sprachbund (see, e.g., Joseph 2009).

The existence of markers in the noun phrase to specify for indefiniteness (and in many cases specificity, e.g. ‘a certain man’) is widespread in the area, being found in NENA (xa- ‘one, a (certain)’), Northern Kurdish (-ēk [ēk] < yek ‘one’), Sorani (-ēk [ē:k] < yek), qəltu Arabic (fayād < fard ‘individual’), Baghdadi Arabic (fadd < fard) and Turkish/Azeri (bir ‘one’).

4 Conclusion

Though not the dominant contact language, Arabic has influenced NENA dialects considerably, especially those in close contact with Arabic-speaking population centres, namely the Christian Nineveh Plain dialects, the Jewish Lišâna Deni dialects and the Christian dialects in Şırnak province in Turkey.
The influence from Arabic is manifested mostly in lexicon, phonology and morphology, and less in syntax.

Arabic influence has occurred in different phases. Earlier Arabic influence was mostly indirect, via Kurdish loans, but direct borrowing seems to have occurred too.

In the twentieth and twenty-first centuries, Arabic influence has increased dramatically in the dialects spoken in Iraq, due to mass education exclusively in Arabic, as well as national media, military service, improved transport, and migration to the Iraqi cities. Most NENA speakers are bilingual and speak Arabic with native competence, and this has affected how they use Arabic words within their own language. Typically, recent loans are unadapted and close to code-switching.

As much of the fieldwork on which this description depends was undertaken in the late twentieth century or first few years of the twenty-first century, in future research it would be interesting to look at the speech of young people today and see whether much has changed. It would also be worth comparing the speech of communities in their ancestral villages with diaspora communities living in (or who have recently left) Baghdad or Basra.

Further reading

Most work on NENA and language contact has focused on contact with Kurdish. To my knowledge, only three works are dedicated to contact with Arabic, none of which is an overview: Sabar’s (1984) study of Arabic influence in the early texts in Jewish Lišāna Deni; Coghill’s (2010; 2012) research into a prospective construction found in the Christian Nineveh Plain dialects, which has apparently grammaticalized under influence from Arabic; and Coghill’s (2015) study of new verbal derivations borrowed from Arabic into various Neo-Aramaic languages, including NENA.

Khan’s (2002) grammar of Christian Qaraqosh contains a great deal of information, scattered through the volume, about contact influences from Arabic, Qaraqosh being one of the dialects most affected by such influence.

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**Abbreviations**

| 1, 2, 3 | 1st, 2nd, 3rd person | N. Kurd. | Northern Kurdish |
| Ar. | Arabic | NENA | North-Eastern Neo-Aramaic |
| COMP | complementizer | NEG | negator |
| COP | copula | PAST | NENA Past Base |
| CS | construct state | PL/pl. | plural |
| CSyr | Classical Syriac | PRES | NENA Present Base |
| DEM | demonstrative | PRS | present |
| f/f. | feminine | PRSP | prospective |
| IMPF | Imperfect (prefix conjugation) | REL | relativizer |
| IND | indicative | SG | singular |
| M/m. | masculine |

**Symbols**

I, II, III etc. Arabic verbal derivations
I, II, III, Q NENA verbal derivations
= links two words or morphemes in a phrase with a single stress on the second component (including but not limited to proclitics)
=new links two words or morphemes in a phrase with a single stress on the first component (including but not limited to enclitics)

**References**


