

- [among the people of their tribe]' (Mubarrad, *Muqtaḍab* IV, 116.6–118.3). For references to this *kāna* see Levin (1979:185, n. 1); see also Ibn as-Sarrāj ('*Uṣūl* I, 92.7–8).
- ii. The grammarians say that *kāna allatī fihā ḍamīr aš-ša'n* occurs in examples such as *kāna zaydun qā'imun*, where *kāna* is followed by two nominatives. They assert that this *kāna* contains an implicit pronoun of the 3rd person singular, referring to the noun *aš-ša'n* or *al-'amr* 'the matter, the affair' or *al-ḥadīṭ* 'the story', which does not occur in the sentence. Hence, when saying *kāna zaydun qā'imun*, what the speaker actually intends to say is *kāna š-ša'nu wa-l-ḥadīṭu zaydun qā'imun* 'the affair and the story was: Zayd is standing' (Ibn Jinnī, *Luma'* 16.13–17). The grammarians believe that this implicit pronoun referring to *aš-ša'n* is a subject (*mubtada'*) and that the following clause *zaydun qā'imun* is assigned to it as its predicate (Ibn Ya'īs, *Šarḥ* I, 435.13–19, 1005.8–19, ed. Jahn = III, 116.5–6; VII, 101.14–102.3, ed. Cairo). The implicit pronoun is analyzed as *ism kāna* (Zajjājī, *Jumal* 49.9–10). The examples mentioned by the grammarians show that this *kāna* occurred mainly in poetry.

- ʿIṣbahānī, '*Agānī*' = 'Abū l-Faraj al-ʿIṣbahānī, *al-'Agānī*. 20 vols in 10. Beirut: Ṣalāḥ Yūsuf al-Xalīl and Dār al-Fikr li-l-Jamī', 1970. (Repr. of Būlāq ed.)
- Jurjānī, *Muqtaṣid* = 'Abū Bakr 'Abd al-Qāhir ibn 'Abd ar-Raḥmān al-Jurjānī, *Kitāb al-muqtaṣid fī šarḥ al-'Idāḥ*. Ed. Kāzim Baḥr al-Marjān. [Baghdad]: Dār ar-Rašīd li-n-Našr, 1982.
- Mubarrad, *Muqtaḍab* = 'Abū l-'Abbās Muḥammad ibn Yazīd al-Mubarrad, *Kitāb al-muqtaḍab*. Ed. 'Abd al-Xāliq 'Uḍayma. Cairo: Lajna 'Iḥyā' at-Turāt al-'Islāmī, 1385–1388 A.H.
- Sībawayhi, *Kitāb* = 'Abū Bišr 'Amr ibn 'Uṭmān Sībawayhi, *al-Kitāb*. Ed. Hartwig Derenbourg. Paris: Imprimerie Nationale, 1881–1889.
- Zajjājī, *Jumal* = 'Abū l-Qāsim 'Abd ar-Raḥmān ibn 'Iṣḥāq az-Zajjājī, *Kitāb al-jumal fī n-naḥw*. Ed. 'Alī Tawfiq al-Ḥamad. Beirut and Irbid: Mu'assasat ar-Risāla and Dār al-'Amal, 1984.
- Zamaxšarī, *Mufaṣṣal* = 'Abū l-Qāsim Maḥmūd ibn 'Umar az-Zamaxšarī, *al-Mufaṣṣal fī n-naḥw*. Ed. Jens Peter Broch. 2nd ed. Christiania: Libreria P.T. Mallinngii, 1879.

SECONDARY SOURCES

- Lane, Edward William. 1863–1893. *Arabic-English lexicon*. 8 vols. London and Edinburgh: Williams and Norgate.
- Levin, Aryeh. 1979. "Sībawayhi's view of the syntactical structure of *kāna wa'axawātuhā*". *Jerusalem Studies in Arabic and Islam* 1.185–211.
- Wehr, Hans. 1961. *A dictionary of Modern Written Arabic*. Ed. J. Milton Cowan. Wiesbaden: O. Harrassowitz.
- Wright, William. 1951. *A grammar of the Arabic language*. 3rd ed. 2 vols. Cambridge: Cambridge University Press.

BIBLIOGRAPHICAL REFERENCES

PRIMARY SOURCES

- 'Abū Hayyān, *Manhaj* = 'Abū Hayyān Muḥammad ibn Yūsuf al-Ġarnāṭī an-Naḥwī, *Manhaj as-sālik fī l-kalām 'alā 'Alfiyyat Ibn Mālik*. Ed. Sidney Glazer. Ann Arbor, Mich.: Edwards Brothers, 1947.
- 'Axfāš, *Ma'ānī* = 'Abū l-Ḥasan Sa'īd ibn Mas'ada al-'Axfāš al-'Awsat, *Ma'ānī l-Qur'ān*. Ed. 'Abd al-'Amīr Muḥammad 'Amīn al-Ŵard. 2 vols. Beirut: 'Ālam al-Kutub, 1986.
- Ibn al-'Anbārī, '*Asrār*' = 'Abū l-Barakāt 'Abd ar-Raḥmān ibn Muḥammad Ibn al-'Anbārī, '*Asrār al-'arabiyya*'. Ed. Christian Friedrich Seybold. Leiden: E.J. Brill, 1886.
- Ibn Jinnī, *Luma'* = 'Abū l-Faṭḥ 'Uṭmān Ibn Jinnī, *al-Luma' fī n-naḥw*. Ed. Ḥadī M. Kechrida. Stockholm: Almqvist and Wiksell, 1976.
- Ibn as-Sarrāj, '*Uṣūl*' = 'Abū Bakr ibn as-Sarī Ibn as-Sarrāj, *Kitāb al-'uṣūl fī n-naḥw*. Ed. 'Abd al-Ḥusayn al-Fatḥī. 4th ed. 3 vols. Beirut: al-Resalah, 1999.
- Ibn Xaššāb, *Murtajil* = 'Abū Muḥammad 'Abdallāh ibn 'Aḥmad Ibn Xaššāb, *al-Murtajil*. Ed. 'Alī Ḥaydar. Damascus, 1972.
- Ibn Ya'īs, *Šarḥ* = Muwaffaq ad-Dīn 'Abū l-Baqā' Ya'īs Ibn Ya'īs, *Šarḥ al-Mufaṣṣal*. Ed. Gustav Jahn. 2 vols. Leipzig, 1882–1886. Ed. Cairo, 10 vols. Cairo: Maktabat al-Mutanabbī, Beirut: 'Ālam al-Kutub, n.d.

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Kanuri

1. KANURI AND ARABIC

The first contact between Islam and the empire of Kanem, situated near Lake Chad, was made through trade. Kanem had commercial links with Tripoli in North Africa via Kavar and the Fezzan. This trade "provided the gateway for Islam to enter Kanem" (Clarke 1982:67). In the second half of the 8th century, a more permanent Muslim presence was established on the Kanem-North African trade route with the establishment of the small states of Ajar Fazzan and Zawila; Zawila, further south and close to Kanem, was a center for Ibadite Islam. Kanem became Muslim at the beginning of the 12th century. According to some scholars, the first Muslim ruler in Kanem was Humai Jilme of the Saifawa dynasty (from ca. 1085 to 1097 C.E.).

Kanuri is the Nilo-Saharan language with the largest number of Arabic loans, second only to Hausa (see Baldi 2002). Its lexicon “might be described as a *layered* lexicon. It is layered chronologically in the sense that it is possible to recognize words in the language that are older as distinct from words that have not been in the language as long and also others that have entered the language from other language sources. Borrowed words in the lexicon as well are layered chronologically, since certain Arabic loan words have been part of the language for as much as a thousand years, whereas words from Hausa entered much later, and words from English only very recently” (Hutchison 1981:10).

It has been observed that one important subpart of the Kanuri lexicon is made up of historically derived words that are now recognizable as composed of word formatives that are no longer productive in the language (see Baldi 1998).

Words that have entered the Kanuri language from sources other than Arabic are insignificant in comparison to those from Arabic. Many have been greatly altered by the phonology of Kanuri.

2. PHONOLOGY

Kanuri seems to be a language with a tendency to erosion of the phonetic shape of the borrowed words. This phenomenon does not seem to correlate with the position of the syllable, consonant, or vowel eroded in the word. In fact, one glance at the loanwords shows that this erosion may take place in any part of the word: *xarāj* > *arāji* ‘[land] tax’, *ṣadaqa* > *sādāa* ‘alms’, *ṭaman* > *tāma* ‘price’. Sometimes the two variants (i.e. with and without the phoneme assimilated) coexist: *ṣulḥ* > *sālfu/solô* ‘reconciliation’, *xarāj* > *harājilarāji* ‘[land] tax’, *xalq* > *ālāgalālāa* ‘creation’, *aql* > *hāngallāngal* ‘intelligence’.

In Kanuri there is a tendency to preserve within loanwords the original Arabic geminates: *dābba* > *dābba* ‘animal’, *ḥujja* ‘argument’ > *hūjja* ‘reason’, *’illā* > *illā* ‘except’, *’ammā* > *ammā* ‘but’, *janna* > *zānna* ‘paradise’. There are only a few exceptions, probably due to colloquial use: *mu’allim* > *mālēm* ‘teacher’, *mu’allima* > *mālamā* ‘female teacher’.

Individual Arabic phonemes are realized in Kanuri as follows (for more details see Baldi 2002):

/ʔ/ > Ø: *ra’y* > *râi* ‘opinion’

/b/ > /b/: *rajab* > *Rāzab/Rājab* ‘seventh Islamic month’; in intervocalic and medial position /b/ > /w/: *xuṭba* > *kútúwa* ‘Friday sermon’; in final position /b/ > /b/ or sometimes /p/: *tartīb* > *tartīp* ‘order’

/t/ > /t/: *turjumān* > *turjīmān* ‘interpreter’; in two cases, /t/ > /d/: *tābit* ‘firm, fixed; permanent’ > *tāwadā* ‘definite, certain, sure’, *sabt* > *sābda* ‘Saturday’

/t/ > /t/: *taman* > *tāma* ‘price’; in two cases /t/ > /s/: *ṭumn* > *sūmmun* ‘one-eighth’, *ḥadīṭ* > *ḥadīs* / *ḥadīsā* ‘Hadith, traditions about the Prophet’

/j/ > /j/: *jarīda* (via Hausa *jārīdā*) > *jerīda* ‘newspaper’; sometimes in intervocalic or initial position /j/ > /z/: *’ajal* > *azāla* ‘hurry, haste’, *jum’a* > *zāma* ‘Friday’; in one case /j/ > /g/: *farj* > *fārgi* ‘vagina’; in another case /j/ > /d/: *sarj* > *sārdā* ‘saddle [for horse]’

/ḥ/ > /h/: *baḥr* > *bāhar* ‘sea’; often, in initial, intervocalic, or final position /ḥ/ > Ø: *ḥarf* > *ārawu* ‘letter of the alphabet’, *muḥarram* > *Mārrəm* ‘first month’, *ḍabḥ* > *dūwa* ‘slaughter’; in two cases /ḥ/ > /k/: *ṣaḥn* ‘dish, plate’ > *sakān* ‘kettle’, *faṣīḥ* > *fāsek* ‘eloquent’; in another case /ḥ/ > /t/: *ṣulḥ* > *sālfu* ‘reconciliation’

/x/ > /h/: *xabar* > *hawâr* ‘news’; often /x/ > Ø: *xādim* ‘domestic servant’ > *ādīm* ‘eunuch’; in two cases /x/ > /k/: *xuṭba* > *kútúwa* ‘Friday sermon’, *xums* > *kúmsa* ‘sign marking end of every fifth verse of the *Qur’ān*’

/d/ > /d/: *dars* > *dāras* ‘lesson’; in one case /d/ > /t/: *labbād* > *labbāt* ‘felt’

/ḍ/ > /d/: *ḍabḥ* > *dūwa* ‘slaughter’; /ḍ/ > /z/ only in a very few cases: *ḍakar* > *zākar* ‘penis’

/t/ > /t/: *raṭl* > *rātal* ‘a weight’; once with dissimilation: /t/ > /l/: *ḥarīr* > *harīl* ‘silk’

/z/ > /z/: *zamān* > *zamān* ‘time’; but often /z/ > /j/: *zabād* ‘civet’ > *jībda* ‘civet cat’; in one case /z/ > /s/: *ḥizb* > *isəp* ‘one-sixtieth part of the *Qur’ān*’

/s/ > /s/: *bāsūr* ‘hemorrhoids’ (? via Fulfulde *baksur*) > *boksūr* ‘tumor; piles’; but sometimes /s/ > /š/ before front vowel: *masjid* > *māshīdi* ‘mosque’, *as-sirr* > *ashīr* ‘secret’

/š/ > /š/: *šahāda* > *shāda* ‘creed formula’; but sometimes /š/ > /s/, under the influence of Fulfulde, where it is regular: *šukr* > *askəra* ‘thanks’, *muškil* ‘equivocal, problematic’ > *mískil* ‘misunderstanding, altercation’, *qurūš* [pl.] > *gúrsu* ‘Maria Theresa dollar’

/ṣ/ > /s/: *ṣandūq* > *sandúwu* ‘box’; but sometimes /ṣ/ > /š/: *ṣābūn* > *shawūl* ‘soap’, *ṣafar*

> *Sháwur/Sáwur* ‘second month’, *muṣ̣ṣ̣ba* > *mashíwa* ‘misfortune’, *aṣ̣-ṣawm* > *ashám* ‘the fast [of Ramadan]’, *maqāṣṣ* > *mówosa* ‘scissors’

/ḍ/ > /l/: *al-qāḍī* > *alkáli* ‘judge’; sometimes /ḍ/ > /d/: *al-arḍ* > *lárda* ‘earth’, *ḥaḍara* ‘to be present’ > *ádári* ‘witnessing’, *ramaḍān* > *Ramadán* ‘ninth month’, *marad* ‘disease, malady’ > *márdí* ‘wrinkles or folds of the flesh’

/ṭ/ > /t/: *tāsa* (via Hausa *tāsà*) > *tása* ‘metal bowl’; in one case /ṭ/ > /l/, with assimilation to the preceding phoneme: *lūt* ‘Lot’ > *lúlu* ‘sodomy’

/ḍ/ > /z/: *naḍm* > *názamu* ‘verse’; in one case /ḍ/ > /s/: *’aḍhār* (pl. of *ḍuhr*) ‘midday prayer’ > *ásar* ‘late afternoon’

/l/ > Ø: *na’na’* > *naná* ‘mint’; -C- + /l/ > -CC-: *rub’* > *rábbulrúbbu* ‘one-quarter’

/ġ/ > /g/: *ġanīma* (via Hausa *gānīmā*) > *ganíma* ‘booty, loot’; in one case /ġ/ > /l/: *maġrib* > *máiríwu* ‘prayer at sunset’

/f/ > /f/: *fard* > *fáral* ‘religious duty’; sometimes /f/ > /w/: *al-fūṭa* ‘serviette, towel’ > *alwúta* ‘handkerchief’

/q/ > /k/: *qabr* > *káwar* ‘grave’; in some cases /q/ > /w/: *sūq* > *kasúwu* ‘market’, *lṣandūq* > *sandúwu* ‘box’, *al-qur’ān* > *Luwurān* ‘the *Qur’ān*’; but in a very few cases /q/ > /g/, reflecting the pronunciation of some West African languages and local Arabic: *bunduqíyya* > *bándág* ‘gun’, *xalq* > *álaga* ‘creature’, *xalq* > *álága* ‘creation’, *qahwa* > *gáwa* ‘coffee’; in a few cases /q/ > Ø: *xalq* > *áláa* ‘creation’, *ṣadaqa* > *sádáa* ‘alms’, *tāqa* > *táa* ‘window’, *waqa’a* > *waajīn/wakajīn* ‘to occur, happen’; in one case /q/ > /y/: *waṭīqa* ‘document, paper’ > *wotíya* ‘letter’

/k/ > /k/: *kāfūr* > *kawûr* ‘camphor’; in a few cases /k/ > /g/: *baraka* > *bárga* ‘blessing’; in a few cases /k/ > Ø: *ḥākam* > *háá* ‘fine’; in one case /k/ > /w/: *ḥukm* > *hówum* ‘judgment’

/l/ > /l/: *jumla* > *júmla* ‘total’

/m/ > /m/: *miṭāl* > *misāl* ‘example’; in one case /m/ > /w/: *al-ma’āṣ* ‘means of subsistence’ > *alwóshi* ‘salary’

/n/ > /n/: *qarn* > *kárnu* ‘century’; in one case /n/ > Ø in final position: *taman* > *táma* ‘price’; in another case /n/ > /m/: *burnus* > *barmúsu* ‘burnous, hooded cloak’

/h/ > /h/: *hijra* > *hújira* ‘the Hegira’; in a couple of cases /h/ > Ø: *jahannam* ‘hell’ > *jánəm* ‘fire’, *rahn* > *rân* ‘pawn; mortgage’

/w/ > /w/: *wahla* ‘fright, terror’ (via Hausa *wàhalà* ‘trouble’) > *wahála* ‘difficulties, troubles’;

sometimes /w/ > Ø, especially in medial position: *jawāb* > *jaáwu/zaáwu* ‘answer’; in one case /w/ > /m/: *tāwūs* > *támus* ‘peacock’

/y/ > /y/: *qiyāma* > *kiyāma* ‘resurrection’

3. MORPHOLOGY, SYNTAX, AND SEMANTICS

In some cases, but not as frequently as in Hausa, the Arabic definite article *al-* is retained as a prefix on the Kanuri word: *al-biṣr* ‘joy’ > *albiṣhir* ‘good news’. In other cases, the *l* of the definite article has become the initial consonant of the loanword in Kanuri, followed in some cases by an epenthetic vowel: *al-qur’ān* > *Luwurān* ‘the *Qur’ān*’.

Apart from the case of the Arabic article retained in loans, there are cases where the *k+* prefix has been applied as a word formative to the Arabic borrowing (*sūq* > *kasúwu* ‘market’). The Kanuri lexicon is made up of historically derived words that are now recognizable as composed of word formatives no longer productive in the language: *’adāla* > *nəm’ádal* ‘justice’, *al-’islām* > *kərmásaləm* ‘Islam’.

Arabic loanwords were introduced in domains of the Kanuri cultural lexicon: jurisprudence (*sharā* < *šarī’a* ‘Muslim law’), trade (*shirgamá* ‘co-owner’ < *širka* ‘partnership’), religion (*kútiwa* < *xuṭba* ‘Muslim Friday sermon’), science and culture (*ilmu* < *ilm* ‘knowledge’, *dárasə* < *dars* ‘lesson’), names of some everyday objects (*shawûl* < *ṣābûn* ‘soap’).

Kanuri not only received Arabic loans but was also a donor language. Many languages acquired Arabic loans in West Africa through Kanuri: Arabic *sūq* ‘market’ > Kanuri *kasúwu* > Buduma *kábukú*; Hausa *kāsuwā*; Kotoko *gásàgbí*; Musgu *kāskú*; Tubu *kasúgu*.

BIBLIOGRAPHICAL REFERENCES

- Baldi, Sergio. 2002. “On Arabic loans in Kanuri”. *Studi Magrebini* 25.45–57.
 —. 2003. “Some statistical analysis on Arabic loans in Kanuri”. *Lexical and structural diffusion: Interplay of internal and external factors of language development in the West African Sahel*, ed. Robert Nicolai and Peter Zima, 9–15. Nice: Sophia Antipolis.
 —. Forthcoming. “Dating Arabic loans in Kanuri”. *Trends in Nilo-Saharan linguistics: Proceedings of the 7th Nilo-Saharan Linguistics Conference, Vienna, September 1998*, ed. Norbert Cyffer. Cologne: R. Köppe.
 Clarke, Peter B. 1982. *West Africa and Islam: A study of religious development from the 8th to the 20th century*. London: E. Arnold.

Cyffer, Norbert and John Hutchison (eds). 1990. *Dictionary of the Kanuri language*. Dordrecht: Foris.

Hutchison, John P. 1981. *The Kanuri language: A reference grammar*. Madison: University of Wisconsin.

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Kaškaša and Kaskasa

The terms *kaškaša* and *kaskasa* refer to the phenomenon of using the suffixes /š/ and /s/, respectively, for the attached object pronoun of the 2nd person feminine singular (cf. Jindī 1983:I, 359–364). These suffixes were not used in Classical Arabic, but they occurred in some dialects in the Arabian Peninsula. The Arab linguists describe this phenomenon, although there is some inconsistency in their descriptions. Sibawayhi (*Kitāb* IV, 199–200), Ibn Jinnī (*Sirr aš-šinā'a* I, 219; *Xašā'is*, II, 11–12), and Ibn Ya'īš (*Šarḥ al-Mufaššal* II, 9.48–49) recognize two groups of people in the Arabian Peninsula who use *kaškaša*. One group uses /š/ instead of Classical Arabic /ki/, as in 'a'taytiš 'I gave you [fem.]', and the other group adds /s/ to Classical Arabic /ki/, as in 'a'taytikiš 'I gave you [fem.]'. Both phenomena occur in pausa.

The explanation that Sibawayhi advances for this change is that the speakers wanted to make a distinction between males and females when addressing them. The Classical Arabic reference to a male person is /ka/, and both feminine /ki/ and masculine /ka/ lose their final vowel in pausa, so that the distinction between the two genders disappears there. Sibawayhi adds that the speakers select /š/ since it is a voiceless sound, just like /k/, e.g. 'inniš dāhiba 'you [fem.] are leaving'; māliš dāhiba 'why are you [fem.] leaving?', instead of 'innaki and mālaki.

Kaskasa, on the other hand, is explained by Sibawayhi as the addition of /s/ to the feminine /ki/, as in 'a'taytikis 'I gave you [fem.]', by some speakers in pausa. Neither Sibawayhi nor Ibn Ya'īš mentions the replacement of /ki/ by /s/, but Ibn Jinnī and other linguists do mention that /s/ replaces /ki/ in the speech of some speakers, just as in the case of *kaškaša*.

The Arabic grammatical literature mentions different tribes whose dialects exhibited these phenomena. *Kaškaša*, for instance, was said to

be used among the Tamīm (Zamaxšārī, *Rabī' al-'abrār* IV, 273; Ibn Ya'īš, *Šarḥ al-Mufaššal* II, 49; Tā'ālibī, *Fiqh* 39). Ibn Manẓūr (*Lisān* XII, 232), as-Suyūṭī (*Muẓhir* I, 221), and Ibn Jinnī (*al-Xašā'is* II, 11–12) conclude that *kaškaša* occurred among Rabī'a. On the other hand, Ibn Ya'īš (*Šarḥ, al-Mufaššal* II, 49) and Ibn Fāris (*Šāhibī* 33–36) conclude that Bakr ibn Wā'il used to have *kaškaša*.

Kaskasa is mentioned for Bakr ibn Wā'il as well (Ibn Manẓūr, *Lisān* XII, 80; Zamaxšārī, *Rabī' al-'abrār* IV, 273; Ibn Ya'īš, *Šarḥ, al-Mufaššal* II, 49; Tā'ālibī, *Fiqh* 39). Ibn Fāris (*Šāhibī* 33–36) and as-Suyūṭī (*Muẓhir* I, 221) conclude that *kaskasa* occurred in Rabī'a, while Ibn Jinnī (*Xašā'is* II, 11–12) mentions that *kaskasa* occurred among the Hawāzin.

If one traces the occurrence of these phenomena among Arab tribes, it becomes obvious that there is a certain inconsistency in indicating the tribes. This inconsistency may have been caused by the huge size of some tribes. Rabī'a, for example, was a large tribe that included several smaller tribes, such as 'Asd and Bakr ibn Wā'il, who settled in the north and east of the Arabian Peninsula. Another reason for the inconsistency may have been the continuous traveling of the Arabs, which led to a dispersal of dialectal features from one place to another through time. In the main, by tracing the locations of the old tribes using *kaškaša* and *kaskasa* on the map, one finds that all of them lived relatively close to each other, roaming from the middle to the north and east of the Arabian Peninsula (see Map 1). Incorrect description may have been another reason for the inconsistency in the descriptions (see Jindī 1983; 'Anīs 1990).

The present-day situation in the Arabian Peninsula is slightly different from that described by the Arab linguists. In the east and northeast of the Arabian Peninsula, one finds that /č/, not /kiš/, is the form used to indicate the feminine attached pronoun. However, this change is not limited to the 2nd person attached feminine pronoun. Any /k/ may be replaced by /č/ in some positions, as in čēf al-hāl 'how are you?', dič 'rooster', fič 'open!', instead of kēf, dīk, fik. In addition to the east and northeast of Saudi Arabia, Gulf countries such as Kuwait, Bahrain, Qatar, and the United Arab Emirates, Iraq, and the southern parts of Jordan and Syria have this feature as well (→ palatalization).