

Recent developments in Semitic and Afroasiatic linguistics
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5. Root structure and noun patterns; comparative lexicography

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Abstract

In this presentation, I will briefly review the typology of loan mechanisms from non-Semitic to Semitic and then proceed to a more intricate question: how can one identify inner-Semitic loans as opposed to regular cognates, or, differently put, at which point can a word be considered to be fully integrated in the system of a given language. In the latter context, I am especially interested in the phenomenon of lexical doublets within one and the same language that emerge through inner-family borrowing. Such doublets, in turn, have to be distinguished from phonological doublets that simply serve semantic differentiation.

1 Introduction

“The problem with Semitic loans is to distinguish them from cognates. And in respect of non-Semitic loans, if they cannot be tracked, it is not always possible to determine whether they are Kulturwörter, Wanderwörter, cross-cultural loanwords or even isoglosses.” (Watson 2005: 194)

2 Borrowing in individual Semitic languages

2.1 Akkadian

Akkadian		Source word in the language of origin
<i>dû</i>	‘hill’	Sumerian <i>du</i>
<i>ekallu</i>	‘palace’	Sumerian <i>é.gal</i> ‘big house’
<i>erēqu</i>	‘flee’	Aramaic √‘RQ
<i>gadalû</i>	‘dressed in linen’	Sumerian <i>gada lá</i>
<i>isinnu</i>	‘festival’	Sumerian <i>ezen</i>
<i>kasulathu</i>	‘a device of copper’	Hurrian <i>kasulath-</i>
<i>kisallu</i>	‘court’	Sumerian <i>kisal</i>
<i>laqāhu</i>	‘take’	Ugaritic √LQH
<i>paraššannu</i>	‘part of horse riding gear’	Hurrian <i>paraššann-</i>
<i>purkullu</i>	‘stone cutter’	Sumerian <i>bur-gul</i>
<i>qaṭālu</i>	‘kill’	Aramaic (Amurrite?) √QTL
<i>tupšarru</i>	‘scribe’	Sumerian <i>dub.sar</i> ‘scribe’
<i>urihullu</i>	‘conventional penalty’	Hurrian <i>urihull-</i>

Akkadian

šakkanakku 'military governor'

Twisted path

Akkadian > Sumerian > Akkadian

2.2 Hebrew

2.2.1 Common Northwest-Semitic stock but also Canaanite-Aramaic isoglosses

Canaanite		Aramaic	
√ 'l-y	vs.	√ s-l-q	'to ascend'
√ b-w-ʾ	vs.	√ 'l-l	'to enter'
√ d-b-r	vs.	√ m-l-l,	'to speak'

(cf. McCarter 2008: 78)

2.2.2 Loanwords in Biblical Hebrew

Biblical Hebrew

hēkāl 'temple, palace'

ṭāpšār 'military officer'

ʾiggéret 'letter'

miskēn 'pauper'

(cf. Mankowski 2000: 167–170)

Source word in the language of origin

Akkadian *ekallu* (Sum. *é.gal* 'big house')

Akkadian *ṭupšarru* 'scribe' (Sum. *dub.sar* 'scribe')

Akkadian *egirtu*

Akkadian *muškēnu*

šēš 'linen'

ṭabbáʿat 'sealing ring'

(cf. McCarter 2008: 79)

Egyptian *šš*

Egyptian *ḏb* 'wt'

2.2.3 Loanwords in Medieval Hebrew

from Greek:

ʾawīr 'air'

ʾambāṭiyā 'bathroom'

ʾaksanyā 'inn'

ʾasimōn 'telephone token'

basis 'base'

zūg 'pair'

paršūp 'face'

pinqas 'notebook'

tīq 'file'

from Aramaic:

le-sayyea 'to help'

le-targem 'to translate'

girsā 'version'

darga 'rank, step'

ʿubda 'fact'

zabban 'salesman'

sappār 'hairdresser'

maškanta 'mortgage'

harpatqa 'adventure'

2.2.4 Loanwords in Modern Hebrew

Arabic	Hebrew	
<i>ta'riḥ</i>	<i>tarix</i>	'date (calender)'
<i>'adīb</i>	<i>adiv</i>	'polite'
<i>muhāḡir</i>	<i>mehager</i>	'emigrant/immigrant'

Ezra 2:2 *mārdakay bilšān* (< *Marduk bēl-šunu* 'Marduk is their Lord') >
 Midrashic exegesis: *bilšān* 'he knew [seventy] languages' > *balšān* 'linguist'
 (Kutscher 1982: 234)

2.3 Arabic

2.3.1 Loan typology (Endreß 1992; Edzard 1998; Watson 2005)

2.3.1.1 Loanwords from Greek via Syriac

Greek	Syriac	Arabic	
γένος	<i>gensā</i>	<i>jins</i>	'kind'
στοιχείον	<i>'estuksā</i>	<i>'ustuquuss</i>	'element'

2.3.1.2 Loanwords from Syriac

Syriac	Arabic		
<i>kyānā</i>	<i>kiyān</i>	'element'	(cf. Greek)
<i>'elltā</i>	<i>'illa</i>	'cause' ("defect")	(cf. Greek αἴτιον)

2.3.1.3 Loanwords from Persian

Persian	Arabic		
<i>goh(ar)</i>	<i>jawhar</i>	'substance' ("jewel")	(cf. Greek φύσις)
<i>purmahi</i>	<i>burmāhi</i>	'full moon'	

2.3.1.4 Loanwords from Greek as quasi-transcriptions

Greek	Arabic	
κατηγορία	<i>qāṭāḡūriyās</i>	'categories'
σοφιστική	<i>sūfistiqā</i>	'sophistics'

2.3.1.5 Loan translations ("calques")

Greek	Arabic	
λογική	<i>mantiq</i>	'logic'
ἀριτή	<i>faḍīla</i>	'high quality' ("best")

2.3.1.6 Secondary creation after original borrowing

Greek	Arabic-1		Arabic-2
στοιχείον	<i>ʿustuquuss</i>	‘element’	<i>ʿunṣur</i> ‘element’
ἀίτιον	<i>ʿilla</i>	‘cause’ (“defect”)	<i>sabab</i> ‘cause’

2.3.1.7 Abstract neologisms

Greek	Arabic	
τὸ πρὸς τι	<i>ʿidāfa</i>	‘relation’
τὸ τί ἐστὶ	<i>māhīya</i>	‘essence’

2.3.2 Aramaic loans in Arabic (Retsö 2006)

2.3.2.1 Complications

- complicated rules for /b, g, d, k, p, t/ shift (post-vocalic spirantization) in Aramaic
- reduction of short vowels in unstressed open syllables to *šwā* or zero
- *ā* > *o* (*ō*) in northern-central Syria and Mesopotamia (not in other Aramaic-speaking areas)
- common Semitic *p* always *f* in Arabic
- complicated distribution of sibilants
- both Aramaic and Arabic have *t* / *ṭ* and *d* / *ḍ*, but in different distribution

2.3.2.2 Examples

Aramaic	Arabic	
<i>ašlem</i>	<i>ʿaslama</i>	‘to submit [to the new religion]’
<i>bābā</i>	<i>bāb</i>	‘gate’
<i>bi ʿtā</i>	<i>bī ʿa</i>	‘church’
<i>šbīlā</i>	<i>sabīl</i>	‘path’
<i>tḥar</i> ‘break’	<i>tatbīr</i>	‘destruction’
<i>ʿalmā</i>	<i>ʿālam</i>	‘world’
<i>šlōtā</i>	<i>ṣalāt</i>	‘prayer’
<i>purqānā</i>	<i>furqān</i>	‘redemption’

2.3.2.3 Semantic doublets

<i>kataba</i> ‘to write’ (from Aramaic/Hebrew)	vs.	‘to put together’ (Arabic)
<i>darasa</i> ‘study’ (from Aramaic <i>draš</i>)	vs.	‘to wipe out’ (Arabic)
<i>dīn</i> ‘judgment’ (from Aramaic <i>dīnā</i>)	vs.	‘debt’ (Arabic)

2.3.3 Ethiopic loans in Arabic (Weninger 2007)

Ethiopic	Arabic
<i>waqf</i> 'bracelet'	<i>waqf</i> 'bracelet'
<i>kabaro</i> 'drum, timbrel'	<i>kabar</i> 'kettle-)drum'
<i>maṣḥaf</i> '(any kind of) book'	<i>muṣḥaf</i> 'book (especially copy of the Qur'ān)'
<i>manbar</i> 'chair, throne'	<i>minbar</i> 'pulpit' (no root √ n–b–r 'sit' in Arabic)

2.3.4 Modern European-Arabic contact (Edzard 2012)

As other Semitic languages (cf. Bolozky 1999 for Israeli Hebrew), Arabic has always successfully managed to integrate foreign vocabulary in its root and pattern system. Two well-known classical examples inherited from Greek and Latin, respectively, are *ġins* 'species, kind' (from *génos* via Aramaic *gensā*) and *ṣirāt* 'path, street' (from *strata*). A modern example is the noun *raskala* 'recycling', in which the English letters *r*, *c* [s], *c* [k], and *l* are mapped onto a canonical Arabic quadriliteral C1aC2C3aC4a pattern. Neologisms under European influence can also emerge on the basis of Semitic roots. The verb *'aslama*, for instance, functions in the meaning 'to islamise' as a quasi-quadriliteral verb (as opposed to form IV as in *'aslama* 'to become a Muslim'), from which a passive-reflexive form *ta'aslama* 'to be islamised' can be derived.

Morpho-syntactic European influence can be observed in technical neologisms (cf. Ali 1987) involving (quasi-)prefixes or compounding, two features in principle not germane to Semitic. Nouns and adjectives such as *lā-nihā'īya* 'infinity', *lā-sāmīya* 'antisemitism', *ġanūb-'ifrīqī* 'South-African', and *šibh-rasmī* 'semi-official' are cases in point (cf. Monteil 1960: 131-142; Blau 1981: 172-174; Badawi et al. 2004: 58f., 751f.). Blends as a phenomenon *per se*, on the other hand, have been attested across Semitic for a long time – cf. the Arabic technical term *naḥt* '[word] sculpture' – and need not necessarily be attributed to European influence. The term *ra'smāl* 'capital', for instance, an annexation synchronically reanalysed as a compound, has a precursor already in Qur'ānic *ru'ūsū 'amwālī-kum* 'your wealth' (Q 2: 279). True neologisms include terms like *kahrāṭas* 'electro-magnetism', deriving from the compounding of *kahrabā'* 'electricity' + *maġnātīs* 'magnet'. Appositional structures can equally be reanalysed as quasi-compounds, as can be observed in neologisms like *waṭanī-qaawmī* 'ethno-political' or *iqtisādi-iġtimā'ī* 'socio-economic'. Occasionally, even attributions can undergo such a process, as witnessed by the terms *al-farīq 'awwal* 'the lieutenant-general' (as opposed to expected *al-farīq al-'awwal*) and *'amīn 'āmm* 'secretary-general' in constructions like *'amīn 'āmm al-'umam al-muttaḥida* 'the Secretary-General of the United Nations' (as opposed to expected *'amīn al-'umam al-muttaḥida al-'āmm*) (cf. El-Ayoubi et al. 200: 49f.).

Besides the above-mentioned morphologically assimilated word type *raskala*, modern Arabic features a fair number of unassimilated forms (save for means of linear derivation, typically *nisba* endings). This holds for many Latin- or Greek-based terms like *bibliōġrāfiyā* 'bibliography' or *tiknōqrāṭ* 'technocrat' (cf. Badawi et al. 2004:

742). Often, native forms preferred by language academies coexist with borrowed forms, a notable example pair being *hātif* “invisible voice” and *tilifōn* ‘telephone’. Regional factors play a role as well; thus, one finds French-based *’otél* ‘hotel’ and Turkish-based *lokanda* besides the native Arabic terms for ‘hotel’, *funduq* and *nazl* (cf. Badawi et al. 2004: 743).

In the course of loan processes the Standard Arabic phoneme inventory can, but need not adjust to the borrowed source words. Whereas *television* can be adapted as *tilivizyōn* or *tilifizyōn*, depending on the sociolinguistic register, *police* is always rendered as *būlis* – unless the “native” term *šurṭa* is used, in itself a loanword from Greek *chórtes*/Latin *cohors*, as many Arabs feel disinclined (but are, of course, not unable in principle) to pronounce an unvoiced /p/. (For orthographic processes in the course of lexical borrowing from English to Arabic cf. also Weninger 2001.)

2.4 Ethio-Semitic

2.4.1 Cushitic substratum

There are ubiquitous traces of Cushitic substratum in Ethio-Semitic (cf. Leslau 1945, 1952; Appleyard 1977). Appleyard (1977) identifies Cushitic loans in the following semantic fields:

- 1) “man”, comprising general terms, kinship terms, and parts of the body, e.g., Amharic *aggot* ‘uncle’, cf. Bilin (Central Cushitic) *’äg*;
- 2) “the domestic environment”, comprising agricultural activities and implements, crops, domestic animals, food and its preparation, and the [realm of the] house, e.g., Amharic *doro* ‘chicken’, cf. Saho-Afar (East-Cushitic) *dorho*;
- 3) “the natural environment”, comprising natural phenomena, flora, and fauna, e.g., *däga* ‘highlands’, cf. Bilin (Central Cushitic) *dag* ‘summit, above’;
- 4) “social organization”, comprising law and government, economy, warfare, and religion, e.g., *aṭe* ‘emperor’, cf. Kemant (Central Cushitic) *ašena*;
- 5) “grammatical items”, comprising pronouns, numerals, and particles, e.g., *ši(h)* ‘thousand’, cf. Bilin (Central Cushitic) *šix*.

2.4.2 Italian elements in Ethio-Semitic (Edzard 2003)

The lexical influence of Italian – as well as lexical code-switching in general – is prominent in the whole Ethio-Semitic area. Italian loanwords in Amharic, which often carry a special semantic shade, can be tentatively subcategorized as follows (the following list is extrapolated from Leslau 1976; all transcriptions are done according to the Ethiopic syllabary):

(i) persons, professions: *’amamma* ‘mom’, *mammo* ‘male baby’, *gutto* ‘little stout person’ (Ital. *gatto* ‘tomcat’), *listro* ‘shoe shine boy’ (Ital. *lustrò* ‘shoe crème’);

(ii) vehicles, technique, building material: *fabrika* 'factory', *mākina* 'car', *gomma* 'rubber, tyre', *bukko* 'hole in tyre' (Ital. *buco*), *bonda* 'iron fixation', *targa* 'name tag' (Ital. *targa* 'tag'), *tubbo* '[lead] pipe' (Ital. *tubo*), 'antena' 'antenna', *siminto* 'concrete' (Ital. *cemento*);

(iii) appliances, furniture, tools, instruments, further items: *banko* 'bar table', *bañño* 'bathtub', *trumba* 'trumpet', *pakko* 'packet [of cigarettes]', *pippa* 'pipe', *kandella* 'cigarette lighter', *samuna* 'soap' (Ital. *sapone*), *karta* 'map', *gazeta* 'newspaper';

(iv) clothing, fabrics: *proba* 'fitting-on [at the tailor]' (Ital. *prova*), *kabba* 'coat' (Ital. *cabba*), *kolleta* 'collar' (Ital. *colletto*), *lino* 'linen';

(v) fruits, groceries, dishes, beverages, luxuries ("Genusmittel"): *marmälata* 'jam', *furno* 'bread [of European style]' (Ital. *forno* 'furnace'), *formažo* 'cheese', *sälaša* 'salad', *bira* 'beer', *bun(n)a* 'coffee' ["coffee bean"], *sigara* 'cigar', *šakolata* 'chocolate', *mästika* 'chewing gum' (Ital. *mastiche*);

(vi) measures, abstract terms, institutions, other terms: *litro* 'liter', *muziqa* 'music', *nota* 'note', 'arma' 'sign' (Ital. *arma* 'weapon'), *formula* 'formula', *firma* 'signature', *fina* 'direction' (Ital. *fine* 'purpose'), *polätika* 'politics', *posta* 'post', 'influwenza' 'influenza' (Ital. *influenza*).

Italian loanwords in Tigrinya can be subcategorized as follows (the following list is extrapolated from Eritrean People's Liberation Front 1985; many of the terms given above for Amharic are attested in similar shape):

(i) technique, vehicles: *mākina* 'car', *bəšäkläta* 'bicycle';

(ii) house parts, furniture, household items: *finistra* 'window', *tawla* 'table' (Ital. *tavola*), *piyäti* 'plate' (Ital. *piatto*), *manka* 'spoon' (Ital. *manca* 'left hand'), *forketa* 'fork' (*forchetta*);

(iii) clothes: 'askarba' 'shoes' (Ital. *scarpa*), *qamoča* 'shirt' (Ital. *camica*);

(iv) fruits, dishes: *mele* 'apple', 'aranči' 'Orange' [-i is possibly conditioned by analogy or confusion of number], *mandärini* 'mandarine', *basta* 'noodles';

(v) color terms: *morälo* 'dark' (Ital. *morello* 'black-brown')

A number of Italian loanwords are also found in the Cushitic languages Somali and Oromo (cf. Agostini & Puglielli & Siyaad 1985). Examples include Somali *baasta-da* 'noodles' ("pasta"), *bos-ta* 'Post' (in the latter word the second syllable of the Italian word is re-analyzed as the Somali-suffix *-ta*), *sigaar-ka* 'cigarette'; in Oromo terms like *makiina* 'car' (cf. Gragg 1982: 275) and *postaa* (cf. Gragg 1982: 308) may have possibly been borrowed via Amharic.

Place names at the Horn of Africa have often been transmitted in Italian orthography, for instance *Uccialli* (Amharic *Wäčale*) and *Mogadiscio* (Somali *Muqdishu*). Also, some Italian terms have gained the status of Amharic proper names, notably *märkato*, the big market in Addis Abeba (*mercato*) and *piyassa*, the inner city of Addis Abäba (*piazza*). Some country names in Ethio-Semitic equally reflect Italian pronunciation, e.g., *rusiya* 'Russia' and, of course, *iṭalya* 'Italy' itself.

2.4.3 Diachronic borrowing from Gə‘əz (loss of gutturals) in Amharic

ትምህርት	<i>təmhərt</i>	‘lesson’	vs.	ተማሪ	<i>tāmari</i>	‘student’
መጽሐፍ	<i>māṣḥaf</i>	‘book’	vs.	ጻፈ	<i>ṣafä</i>	‘he wrote’
ደኅና	<i>däḥna</i>	‘well’	vs.	ዳነ	<i>danä</i>	‘he recovered’
ሥዕል	<i>sə‘əl</i>	‘picture’	vs.	ሣለ	<i>salä</i>	‘he painted’

3 Inner-Semitic loans / lexical doublets

3.1 Typology of minimal pairs

3.1.1 Differentiation by stress

<i>übersetzen</i>	‘to cross [a river]’	vs.	<i>übersétzen</i>	‘to translate’
<i>Ténor</i>	‘meaning [of a judgment]’	vs.	<i>Tenór</i>	‘high (male) voice register’
<i>Áraber</i>	‘people from Arabia’	vs.	<i>Aráber</i>	‘horses from Arabia’

(Vennemann 1986: 29ff.)

mašqé ‘something to drink’ vs. *mášqe* ‘alcoholic drink’ (Modern Hebrew via Yiddish)
(Kutscher 1982: 229f.)

3.1.2 Differentiation by spirantization of /b, g, d, k, p, t/: re-phonematization in Syriac Aramaic (Edzard 2001)

semantics:	<i>ḥadūtā</i>	‘joy’	vs.	<i>ḥadūtā</i>	‘cave vor wheat and barley’
category:	<i>garbā</i>	‘scabies’	vs.	<i>garbā</i>	‘scabious’
person:	<i>ḥdīt</i>	‘I rejoiced’	vs.	<i>ḥdīt</i>	‘you (m.s.) rejoiced’

3.1.3 Differentiation by vowel quality

savlanut ‘patience’ vs. *sovlanut* ‘tolerance’ (Modern Hebrew)

3.1.4 Parallel Hebrew and Aramaic forms in Modern Hebrew

haflaya / *ʾaflaya* ‘discrimination’

habṭala / *ʾabṭala* ‘unemployment, laying-off’

3.1.5 Multiple roots

√ ś–ḥ–q (Hebr.)	√ ś–ḥ–q (Eth.)	√ ḏ–ḥ–k (Arab.)	‘to laugh’
√ ṣ–ḥ–q (Ugar.)	√ ṣ–ḥ–q (Hebr.)		‘to laugh’
√ g–ḥ–k (Syr.)	√ ḏ–ḥ–k (Pal.)		‘to laugh’

maṣḥiq ‘amusing’ vs. *məḡuḥak* ‘ridiculous’ vs. *dahka* ‘prank’ (< Arabic) (MH)

3.1.6 Secondary formations (Ussishkin 1999)

a. base

<i>hitkamec</i>	'to be a miser'
<i>kace</i>	'edge'
<i>mica</i>	'treat exhaustively'
<i>hixzik</i>	'to hold'
<i>safar</i>	'to count'

b. base with augment(s)

<i>kamc + an</i>	'miser'
<i>kic + on + i</i>	'extrem'
<i>ta + mc + it</i>	'summary'
<i>ta + xzuk + a</i>	'maintenance'
<i>mi + spar</i>	'number'

c. derived verb

<i>hitkamcen</i>	'to be a miser'
<i>hikcin</i>	'to exaggerate'
<i>timcet</i>	'to sum up'
<i>tixzek</i>	'to maintain'
<i>misper</i>	'to enumerate'

a. base

{slm}	'be safe'
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b. base with augment(s)

<i>'aslama,</i>	'to surrender [to God]'
<i>yuslimu</i>	'become a Muslim'

c. derived verb

<i>'aslama, yu 'aslimu</i>	'islamize'
<i>ta 'aslama, yata 'aslamu</i>	'be islamized'

3.1.7 Different forms (borrowed at different historical stages)

chief vs. *chef*: loaned twice from French in different meanings (Kutscher 1982: 49)

3.1.8 Re-borrowing

yōbel 'fiftieth year' (Lev 25:10) vs. *yovel* 'jubilee' (via Latin) (Kutscher 1982: 232)
mōser 'transmitter' vs. *moiser* 'traitor within the Jewish community' (via Yiddish)

3.2 East Semitic vs. West Semitic: problems with the distribution of gutturals (Tropper 1995; Huehnergard 2003)

3.2.1 Lexical doublets/variants in Akkadian (Edzard to appear)

<i>ḥabālu</i> 'bind'	vs.	<i>ebēlu</i> 'to catch with a net'
<i>ḥadānu</i>	vs.	<i>adānu</i> 'date, temporal limit'
<i>ḥadāru</i>	vs.	<i>adāru</i> 'to be dark, sinister'
<i>ḥaḥû</i>	vs.	<i>aḥû/a'û</i> 'to spit'
<i>ḥaigallatḥe</i>	vs.	<i>ayyigalluḥu</i> 'an animal with horns'

<i>ḥalālu</i>	vs.	<i>alālu</i> 'to hang up'
<i>ḥanna(ka)</i> (NA)	vs.	<i>annaka(m)</i> 'here'
<i>ḥanniša</i> (NA)	vs.	<i>anniša</i> 'hither',
<i>ḥannû</i> (NA)	vs.	<i>annû(m)</i> 'this'
<i>ḥapparrû</i>	vs.	<i>apparrû(m)</i> 'with bushy hair'
<i>ḥarāru(m)</i>	vs.	<i>arāru(m)/erēru(m)</i> 'to be shaken'
<i>ḥarbu</i>	vs.	<i>arbu(m)</i> 'empty, uncultivated'
<i>ḥargānum</i>	vs.	<i>argānum</i> 'a conifer'
<i>ḥaru(m)</i>	vs.	<i>aru(m)/eru(m)</i> 'branch, leaves'
<i>ḥašāru(m)</i>	vs.	<i>ušārum</i> 'sheepfold'
<i>ḥašû(m)</i> III	vs.	<i>ašû</i> 'thyme?'
<i>ḥazāzu(m)</i>	vs.	<i>azāzu(m)</i> 'to hum'
<i>ḥazû(m)</i>	vs.	<i>azû(m)</i> 'to sigh'
<i>ḥazzatu(m)</i>	vs.	<i>azzatu(m)</i> 'goat'
<i>ḥe/ibirtum</i>	vs.	<i>abirtum/ebirtum</i> 'name of month in Mari'
<i>ḥe/idānum</i>	vs.	<i>idānu/edānu(m)</i> 'date, temporal limit'
<i>ḥerēbum</i> II	vs.	<i>arēbu/erēbu(m)</i> 'crow, raven'
<i>ḥermum</i>	vs.	<i>ermu(m)</i> 'cover'
<i>ḥidirtu(m)</i>	vs.	<i>idirtu(m)</i> 'problem'
<i>ḥimāru</i>	vs.	<i>imēru</i> 'donkey'
<i>ḥisû(m)</i> III	vs.	<i>isû(m)</i> 'a kind of fish'
<i>ḥišû(m)</i> III	vs.	<i>e/išû(m)</i> 'debt-note'
<i>ḥulamē/itū</i>	vs.	<i>alamittu</i> 'a wild date palm'
<i>ḥullu(m)</i>	vs.	<i>ullu</i> 'neckring'
<i>ḥumā/ūšu(m)</i>	vs.	<i>u/emāšu</i> 'grappling-hook (for wrestlers)'
<i>ḥuppu</i>	vs.	<i>uppu(m)</i> 'a kind of drum'
<i>ḥupurtum</i>	vs.	<i>upurtu</i> 'a kind of wig'
<i>ḥurbabillu</i>	vs.	<i>urbabillu</i> 'chameleon'
<i>ḥurḥudu(m)</i>	vs.	<i>ur'udu</i> 'throat, windpipe'
<i>ḥurḥuppu</i>	vs.	<i>urruppu</i> 'a vessel with knobs'
<i>ḥuriānu(m)</i>	vs.	<i>uriyānu</i> 'fennel'
<i>ḥurnûm</i>	vs.	<i>urnû</i> 'mint'
<i>ḥuršu(m)</i>	vs.	<i>uršu</i> 'storage place (in the kitchen)'
<i>ḥūru</i>	vs.	<i>ūru</i> 'body part'
<i>ḥurzīnum</i>	vs.	<i>urzīnu</i> 'a tree'
<i>ḥuzālu(m)</i>	vs.	<i>uzālu</i> 'gazelle kid'

3.2.2 Analysis (Kogan 2012: 109–114; Streck, personal communication)

Many of the variants with *ḥ* appear to be Neo-Assyrian or *jungbabylonisch*, others are of Mari provenance. Michael Streck informs me, that these examples can be categorized as follows:

- a) one etymon is loaned from West-Semitic, whereas the other one is genuinely East Semitic Akkadian, e.g., *ḥabālu* and *ebēlu*;
- b) both etyma are loaned, and the alternative *ḥ* ≈ *ʿ* is just of an orthographical nature, e.g., *ḥazzatu(m)* and *azzatu(m)*, both of which represent loaned *ʿazzatu(m)*; the genuine Akkadian counterpart is *enzu*;
- c) both etyma are genuinely Akkadian, and *Ḥ* simply renders /*ʿ*/, e.g., *ḥadāru* and *adāru*;
- d) both etyma are genuinely Akkadian, whereby *Ḥ* represents a guttural phoneme still extant in older Akkadian (e.g., /*ḡ*/), whereas the younger orthography represents the disappearance of the guttural, e.g., *ḥullu(m)* and *ullu* (cf. also Kogan 2012: 112).

Such doublets are not only found in the realm of gutturals. Turning to sibilants, one finds the well-known but still unexplained pair *salāmu(m)* ‘to be in peace with each other’ and *šalāmu(m)* ‘to be in good shape’; the latter variant represents the *lautgesetzlich* “expected” form in East-Semitic.

3.3 Phonological doublets in ʤūrōyo

3.3.1 Outline

		German <i>hand-lich</i> (English <i>hand-y</i>)
English <i>hand-y</i>	>	German <i>Hand-y</i> ([hendi]) ‘cellular phone’
		Arabic <i>ḥāba</i> ‘he returned’
Aramaic <i>tāb</i> ‘he repented’	>	Arabic <i>tāba</i> ‘he repented’
		Aramaic <i>iḥā</i> ‘he grew’
Akkadian <i>uṣṣēṣī</i> ‘he sent out’	>	Aramaic <i>šēṣī</i> ‘he accomplished’
		ʤūrōyo √ <i>dyq</i> , e.g., <i>mādaqlē</i> ‘to look out’
Arabic √ <i>dyq</i>	>	ʤūrōyo √ <i>dyq</i> , e.g., <i>ḍaqlē</i> ‘to taste’
		ʤūrōyo √ <i>nṭr</i> , e.g., <i>nṭarle</i> ‘to wait for’
Arabic √ <i>nḍr</i>	>	ʤūrōyo √ <i>nḍr</i> , e.g., <i>naḍra</i> ‘look, supervision’

Arabic √θny	>	Ṭūrōyo √tny, e.g., <i>lō kō mtāne</i> ‘he doesn’t oppose’ Ṭūrōyo √θny, e.g., <i>θnēle</i> ‘to plough twice’
Arabic √šhd	>	Ṭūrōyo √shð / <u>d</u> (< √shd), e.g., <i>shəð/dle</i> ‘to witness’ Ṭūrōyo √šhd, e.g., <i>mšāhadle</i> ‘to acknowledge Islam’
Arabic √byð/z	>	Ṭūrōyo √byf, e.g., <i>bēfe</i> ‘eggs’ Ṭūrōyo √byð/z, e.g., <i>mbāyað/zle</i> ‘to tin’
Arabic √sğ/jd-	>	Ṭūrōyo √sgd, e.g., <i>sy/gəð/dle</i> ‘to adore, worship’ Ṭūrōyo √sğ/jd, e.g. <i>səğ/jğ/jāde</i> ‘carpet, rug’; but > Ṭūrōyo <i>məzgaftə</i> (via Kurdish <i>mizgeft</i>)

Common Semitic		Arabic		Syriac/Ṭūrōyo
g	≈	ğ / j	≈	g (y / ġ)
ð	≈	ð	≈	d (ð / d)
x / ḥ	≈	x / ḥ	≈	ḥ
θ	≈	ð / z	≈	ṭ
ś	≈	š	≈	s
ʕ / ġ	≈	ʕ / ġ	≈	f
ð / ś	≈	d	≈	f
š	≈	s	≈	š
θ	≈	θ	≈	t (θ / t)

3.3.2 Phonological doublets in Ṭūrōyo (or Syriac – Ṭūrōyo)

involving roots *primae gutturalis* (Sina Tezel 2010: 64–86)

Syriac /ḥ/	Arabic /x/ (/ḥ/)
√ ḥr, e.g., <i>ḥrēno</i> ‘(an)other’	√ ḥr, e.g., <i>m’āxər</i> ‘to be late’
√ ḥbṭ, e.g., <i>ḥwəṭle</i> ‘to beat’	√ xbṭ, e.g., <i>mḥābāṭle</i> ‘to rummage’
√ ḥbr, e.g., <i>ḥawro</i> ‘friend’	√ xbr, e.g., <i>xabro</i> ‘word, information’ (semantics?)
√ ḥwl, e.g., <i>ḥōlo</i> ‘uncle’	√ xwl, e.g., <i>mḥālāti</i> ‘maternal cousin’ (via Kurdish)
√ ḥṭṭ, e.g., <i>mḥāṭo</i> ‘needle’	√ xṭṭ, e.g., <i>xṭūṭo</i> ‘furrow, line’
√ ḥṭm ‘to serve’ (Syriac)	√ xdm, e.g., <i>xādōmo</i> ‘servant’
√ ḥṭr, e.g., <i>ḥaṭro</i> ‘staff’	√ xṭr, e.g., <i>xaṭar</i> ‘danger’ (semantics?)
√ ḥld, e.g., <i>ḥuldo</i> ‘mole’	√ xld, e.g., <i>xuldi</i> ḥēbe ‘they dug in it’
√ ḥlp, e.g., <i>mḥālāfle</i> ‘to change’	√ xlf, e.g., <i>mḥālfōno</i> ‘I act against’

Syriac /ħ/	Arabic /x/ (/ħ/)
√ ħlš 'to gird oneself' (Syriac)	√ xlš, e.g., <i>xālīšo</i> 'finished'
√ ħlq 'to allot' (Syriac)	√ xlq, e.g., <i>xləqle</i> 'to create'
√ ħlṭ 'to mix' (Syriac)	√ xlt, e.g., <i>mxālaṭle</i> 'to stir'
√ ħmr, e.g., <i>ħamro</i> 'wine'	√ xmr, e.g., <i>xamri</i> 'wine-colored'
√ ħss, <i>ħastō</i> 'lettuce' (Syriac)	√ xss, <i>xāse</i> 'lettuce'
√ ħsr 'to be in want of' (Syriac)	√ xšr, e.g., <i>maxšarle</i> 'to incur a loss' (conditioned change s > š in the vicinity of r)
√ ħrḥr 'to snore' (Syriac)	√ xrxr, e.g., <i>xurxur</i> 'snoring'
√ ħtm 'to seal' (Syriac)	√ xtm, e.g., <i>xtəmle</i> 'to finish school'
√ ħrb, e.g., <i>ħāru</i> 'destroyed'	√ xrb, e.g., <i>'axrab</i> 'worse' (suppletive elative to <i>ħarbo</i> 'bad')
√ ħrz 'to perforate' (Syriac)	√ xrz, e.g., <i>xrəzle</i> 'to thread, string'
√ ħrṭ 'to scrape, scratch' (Syriac)	xrṭ, e.g., <i>xrəṭle</i> 'to scratch off'
√ ħwḥ, <i>ħūḥō</i> 'plum-tree' (Syriac)	√ xwx, <i>xawxo</i> 'peach'
√ ħšš, <i>ħāšo</i> 'backside'	√ xšr, <i>xāšra</i> 'side, flank'
√ ħrp 'to be feeble' (Syriac)	√ xrf, e.g., <i>maxrafle</i> 'to be childish'
√ ṭbh 'to slaughter, cook' (Syriac)	√ ṭbx, e.g., <i>ṭbaxle</i> 'to cook'
√ yrḥ, <i>yarḥō</i> 'month' (Syriac)	√ yrx, <i>tārīx</i> 'history, date' (semantics)?
√ mḥḥ, <i>mēḥo</i> / <i>mūḥo</i> 'brain'	√ maxx, <i>māx</i> 'brain' (only in a fixed expression)
√ nḥl, e.g., <i>nāḥūlo</i> 'fine-sifted'	√ nxl, e.g., <i>mōxal</i> 'sieve' (with assimilated <i>n</i>)
√ pḥḥ, <i>fāḥo</i> 'trap'	√ pxx, <i>xafke</i> 'trap' (via Kurdish intermediary form)
√ šḥr 'to compel' (Syriac)	√ sxr, e.g., <i>mšāxarle</i> 'to make subservient'
√ šḥ, e.g., <i>mšālahle</i> 'to rob'	√ slx, e.g., <i>kō sulxi appe</i> 'they are stripping them off (their skin)'
√ ħrq 'to fix, settle' (Syriac)	√ xrq, e.g., <i>xōreq</i> 'permeating through'

3.3.3 Summary

– Tropper (1995: 64):

borrowing in individual cases

– Militarev & Kogan (2000: lxxiv–lxxv):

borrowing, different geographical distribution

– Huehnergard (2003: 111):

partially inter-language loan, semantic contamination

– Edzard (2013, to appear):

phonemic splitting in the course of borrowing

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