

East Caucasian Connections of the Language of the First European Farmers and the Origin of the Word for 'Camel'

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The etymology of 'camel'

1. The word family of *camel* in modern Germanic and Romance languages goes back to Latin *camēlus*, which in turn was borrowed from Greek *kámēlos* (attested since the early fifth c. BC: Aeschylus, Herodotus).
2. The Greek term is generally assumed to have been borrowed from West Semitic (Masson 1967: 66): Biblical Hebrew *gāmāl*, Syriac *gamlā*, Aramean, Sabeian *gamal*, Arabic *ḡamal*, Akkadian *gammalu* (< West Semitic loan because it is found mostly in royal inscriptions, in particular among the tribute brought by Arabian kings). Semitic (Hebrew) *gāmāl* was adopted into Ionian Greek, where it joined inherited **-ā-* in becoming *-ē-* (Kretschmer 1892: 287).
3. Problems:
 - (a) apparently the first *-ā-* was not so treated but replaced by short *a*: why?
 - (b) the initial *g-* of Semitic was replaced by Greek *k-*: why? (Heide 2011: 363).
 - (c) Not attested in Phoenician (plausible source of borrowing), but if it existed it would not help.
4. Preliminary conclusion: Greek definitely borrowed, but route not clear

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Dromedary (*Camelus dromedarius*)

Source: Wikipedia



Bactrian camel (*Camelus bactrianus*)

Source: Wikipedia. By J. Patrick Fischer - Own work, CC BY-SA 3.0, <https://commons.wikimedia.org/w/index.php?curid=17859427>

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Bactrian camel (*Camelus bactrianus*), two-humped

- (1) Native to the cold and dry deserts of Central Asia (Mongolia, Xinjiang)
- (2) Domestication in or before early third millennium BC:

Earliest clay model of Bactrian camel attached to wagon in Namazga IV levels (i.e., ca. 2400 BC) at urbanized Altyn Depe in southern Turkmenistan (L.B. Kirtcho, 'The earliest wheeled transport in southwestern Central Asia: new finds from Altyn-Depe', *Archaeology, Ethnology & Anthropology of Eurasia* 37/1 (2009), 25-33). Camel skeletal remains have been found in third millennium and earlier sites in southern Central Asia and in eastern Iran. This is where slightly later the (presumably non-IE) urbanized Bactria Margiana Archaeological Complex (BMAC, ca. 2250-1700 BC) flourished. Agriculture in the area can be traced back to ca. 7000 BC (Jeitun, Turkmenistan), Near Eastern origin.

(3) Mesopotamia: earliest appearance of the Bactrian camel in an animal list from the mid-third millennium BC: Sumerian **am.si.ḫar.an**, literally 'elephant of the road/caravan'; a different Sumerogram is **am.si.kur.ra**, literally 'elephant of the land/mountains' (cf. Heide 2011: 354-60); points to domestication.

(4) It is possible that Bactrian camels were initially domesticated much earlier in Neolithic times farther east in Xinjiang and Mongolia (Xinglongwa culture, Inner Mongolia, 6100-5300 BC; Potts, 'Camel hybridization and the role of *Camelus bactrianus* in the ancient Near East', *Journal of the Economic and Social History of the Orient* 47 (2004) 143-165)

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Dromedary (*Camelus dromedarius*), single-humped

(1) Probably native to Arabian desert, but extinct in wild state.

(2) Domestication date disputed, tendency is to think that it occurred in the south of the Arabian peninsula in the late 2nd millennium BC (Uerpmann & Uerpmann, 'The Appearance of the Domestic Camel in South-East Arabia', *Journal of Oman Studies* 12 (2002): 235–260; Heide, 'The Domestication of the Camel', *Ugarit-Forschungen* 42 (2011): 331-382, esp. 339-343); Almathen *et alii*, 'Ancient and modern DNA reveal dynamics of domestication and cross-continental dispersal of the dromedary', *PNAS* June 14 (2016): 6707-12).

(3) Dromedary in cuneiform texts: Nippur, Middle Babylonian, 14th-13th c. BCE **anše.a.ab.ba**, Ugarit ca. 1200 BCE **[anše.a.a]b.ba** (Heide 2011: 352, 368); the Sumerogram translates literally as 'donkey of the sea', a neologism which presumably indicates that it arrived in Mesopotamia by trade ship, hence in domesticated form.

(4) ? Clay figurine of dromedary from Ubaid-period Uruk (early 4th mill. BC): domesticated?

? Dromedary remains at Tepe Ghabristan, Iran (period 4, c. 3700-3000 BC; Potts 2004: 155). Camelid faunal remains from Harappan sites of late 3rd and early 2nd millennium BC have been identified in all cases as dromedary (Potts 2004: 151); reliable? domesticated?

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Two theoretically conceivable scenarios for the origin of Semitic *gāmāl*

Scenario 1: Semitic origin.

- Semitic *gāmāl* etc. is an old Semitic word for the wild dromedary.
- The word spread after domestication of the dromedary (after ca. 1500 BC).
- Also applied to Bactrian camel (domesticated known in Mesopotamia since later third millennium BC).
- Borrowed from Semitic, or from an unknown language that itself borrowed from Semitic, into Greek in first millennium BC.

Scenario 2: non-Semitic origin.

- Semitic *gāmāl* etc. did not originate in Semitic but in an unknown language that was spoken somewhere in or near the Central Asian steppes, and applied to the Bactrian camel
- This etymon became widespread when domestication and long-distance transport made the Bactrian camel an economically important commodity (3rd millennium BC onwards).
- The word ended up in the Semitic world together with the animal itself, where it spread to become the word for 'camel' as well as 'dromedary' in the form of Hebrew *gāmāl* and its ilk. In that case *gāmāl* etc. replaced an earlier native Semitic word for 'dromedary'.
- Borrowed from Semitic (which had itself borrowed the word) or from an unknown language in or near the steppe zone into Greek

Relevant thoughts:

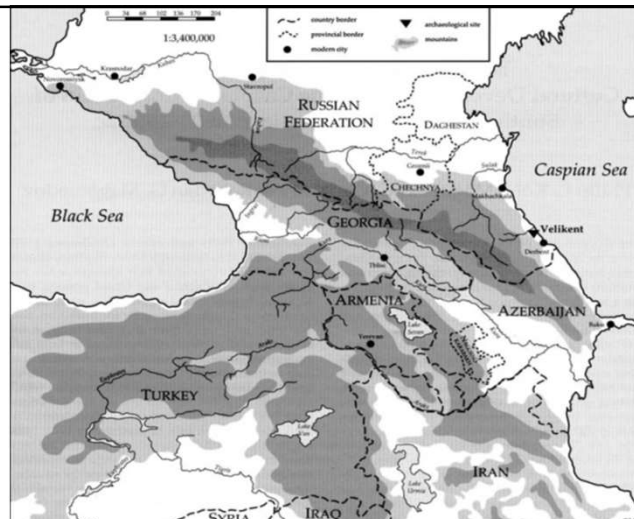
(1) Since no attestation of Semitic *gāmāl* etc. is earlier than the first millennium BC, so more than 1500 years after the first attested appearance of domesticated Bactrian camels in Mesopotamia, this provides enough time for scenario 2 to unfold. Whether it is also a plausible scenario is a different matter: as long as the Asian steppe origin of the word family 'camel' and early attestations of the word north of Mesopotamia are lacking, scenario 2 remains purely hypothetical.

(2) A candidate for being an old word for 'dromedary' is the group of Akkadian *ibīlu*, Sabea *'bi* (7th c. BC, Arabian peninsula) 'dromedary', Arabic *ibīl* 'dromedary, Bactrian camel', which is common in Semitic languages except for the Canaanite group and may itself represent a borrowing of unknown origin (Sima 2000: 18); cf. Heide 346, 345 fn. 26.

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The Caucasus

Source: Philip Kohl, *The Making of Bronze Age Eurasia*, Cambridge (CUP) 2007: 66



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Northeast Caucasian (= Nax-Daghestanian) family

a. Nax: **Chechen, Ingush, Batsbi**

b. Daghestanian

b1. Avar-Andi-Dido subgroup

- **Avar** (northern Avar; many southern Avar dialects)
- Andian: Andi, Axxwax, Chamalal, Tindi, Bagwalal, Botlix, Karata, Godoberi
- Dido: (west:) **Tsez**, Hinux, Xwarshi-Inxoqwar; (east:) **Bezhta**, Hunzib

b2. Lak

b3. Dargwa (many dialects = languages)

b4. Lezgian: Archi, Lezgi, Tabassaran, Agul, Rutul, Budux, Tsaxur, Kryz, Udi,

b5. Xinalugh

Probably related to West Caucasian (Circassian, Abxaz, Ubyx)

Probably not related to Kartvelian (= South Caucasian): **Georgian**, Mingrelian, Laz, Svan

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'Camel' in Caucasian languages: *m-k-l

1. Nax: Chechen

a. Standard (Plains) *emkal*, Akki *emkal*, Kist *enkal* < **amkel* or **amkil* (palatal umlaut)

b. Cheberloy *ankal*, Itumkali *ankal* < **amkal*

Cheberloy does not undergo umlaut, except in two narrow contexts, and as a rule preserves the vocalism of non-initial syllables. Itumkali does undergo umlaut and reduces vowel oppositions in non-initial syllables

2. Nax: Ingush *inkal*

Ing. /i/ ~ Chech. *a is an irregular correspondence; Ing. probably borrowed from Chechen *emkal* (Ing. short e is inappropriate substitute because it is an open centralized vowel that is merging with a [a] in the now dominant variety of Ingush, Nichols 2011: 21).

3. Dido: Tsez *ʃumukúli*, Asax Tsez *ʃomokuli*; Hinuq *ʃomókilu*.

First element probably influenced by 'donkey': Tsez *ʃomoj*, Hinuq *ʃomogʷi*, Xwarshi *umuqʷe*, Inxqwar *omʷoqʷe* < Proto-Dido *ʃomʷ-qʷe, cf. Avar *hamá* (possibly ultimately borrowed from Semitic).

Second element Proto-Dido *kwelV-, *-kwilV-

Nax: Nichols 2004, Nichols-Vagapov 2004, Aliroev 1975: 89; on umlaut in Nax: Imnajshvili 1977, Schrijver forthcoming.

Dido: Xalilov 1999, Xalilov-Isakov 2005

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'Camel' in Caucasian languages: *k-l-m

4. Kartvelian: Georgian *aklemi* (already Old Georgian; stem *aklem-*)

Not reconstructed for Proto-Kartvelian by Fähnrich-Sardschweladse 1995.

5. Revisit Nax: Bacbi *aklam* (borrowed from or influenced by Georgian?)

Note a-vocalism of second syllable; Kadagidze & Kadagidze 1984

6. Revisit Dido: Bezhta *aklamo* (borrowed from or influenced by Georgian?)

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'Camel' in Caucasian languages: conclusion

Four basic structures:

1. **amke/i/-* (Chechen, Ingush; also Tsez-Hinuq **k(w)e/i/-*)

2. **amka/-* (Chechen)

3. **aklem-* (Georgian)

4. **aklam-* (Bacbi, Bezhta < Georgian?)

All forms are obviously related, but how exactly?

Consonants: *m-k-l* versus *k-l-m*

(a) Simplest is to assume an original structure **k-m-l*, so **akmVl-*

(b) East Caucasian has constraints on consonant clusters, Nax turns **akmVl-* into **amkVl-*; also Tsez-Hinuq

(c) Georgian has metathesis: **akmVl-* > *aklVm-*; Bacbi and Bezhta share this order and are known to be in close contact with Georgian.

Vowels

(a) **amka/-* beside **amke/i/-*

(b) Pair attested in Nax and Georgian (if Bacbi + Bezhta < Georgian)

(c) Alternation may be native in East Caucasian: absolutive **amkʃl*, oblique stem **amk(w)ʃ*

Schrijver, 'The origin of vowel alternation in Avar-Andi-Dido (North-East Caucasian). With special reference to the Dido languages', in Andreas Hölzl and Peter-Arnold Mumm, eds., *Klasse Person. Festschrift für Wolfgang Schulze (International Journal of Diachronic Linguistics and Linguistic Reconstruction 15, 2018)*, 199-223

Obviously **amkʃl*, **amkil-* is related to the Semitic and European word for 'camel', but how exactly?

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Pre-Indo-European: the "a prefix"

Iversen & Kroonen, 'Talking Neolithic: linguistic and archaeological perspectives on how Indo-European was implemented in Southern Scandinavia', *American Journal of Archaeology* 121/4 (2017), 511-525.

Non-Indo-European Original	Borrowed Unprefixed Form	Borrowed a-Prefixed Form
Aquatic bird: * <i>trəd</i> < * <i>a-trəd</i>	Gr. (<i>tridāis</i> 'heron') < * <i>trid</i> ; SCr. <i>trida</i> 'stork' < * <i>trid</i> .	ON <i>arta</i> 'real, gannet' < * <i>a-trəd</i> .
Blackbird: * <i>med</i> < * <i>a-med</i>	Lat. <i>merula</i> < * <i>med</i> .	OHG <i>amula</i> < * <i>a-med</i> .
Crustacean: * <i>reʔk</i> < * <i>a-reʔk</i>	ON <i>rakja</i> 'shrimp', Icel. <i>rá</i> 'amphipod' < * <i>reʔk</i> .	Ru. <i>rač</i> 'crayfish'; Lith. <i>erke</i> 'tick, mite' < * <i>a-reʔk</i> .
Garlic: * <i>gedl</i> < * <i>a-gedl</i>	Gr. <i>gēlon</i> < * <i>gedl</i> .	Gr. <i>agōn</i> , Lat. <i>allium</i> < * <i>a-gedl</i> .
Lark: * <i>laʔwəb</i> < * <i>a-laʔwəb</i>	OE <i>lāwrec</i> < * <i>laʔwəb</i> .	Gall. <i>alanda</i> < * <i>a-laʔwəb</i> .
Nut, walnut: * <i>raʔk</i> < * <i>a-raʔk</i> (?)	Lith. <i>rištas</i> , <i>rištas</i> < * <i>raʔk</i> .	Ru. <i>orec</i> < * <i>a-raʔk</i> ; Alb. <i>arret</i> < * <i>a-raʔk</i> (?)
Ore: * <i>raud</i> < * <i>a-raud</i>	Lat. <i>raudas</i> < * <i>raud</i> .	OHG <i>aruc</i> < * <i>a-raud</i> .
Sedge: * <i>sak</i> / * <i>sa-sk</i> < * <i>a-sak</i> (cf. Ba. <i>saka</i>)	OE <i>sage</i> < * <i>sak</i> ; OH. <i>saci</i> < * <i>sa-sk</i> (cf. Ba. <i>saka</i>)	Ru. <i>sika</i> < * <i>a-sak</i> .
Sturgeon: * <i>setr</i> < * <i>a-s(e)tr</i>	OHG <i>sturio</i> < * <i>setr</i> .	Ru. <i>setr</i> < * <i>a-setr</i> .
Turnip: * <i>rep</i> < * <i>a-rep</i>	Gr. <i>rhēp</i> (Lth. < * <i>rep</i>); Lat. <i>rapa</i> .	W. <i>reŋ</i> < * <i>a-rep</i> (cf. Ba. <i>arbi</i>)
Wiggly animal: * <i>sker</i> < * <i>a-sker</i>	OHG <i>skara</i> < * <i>sker</i> .	Gr. <i>skara</i> 'worm' < * <i>a-sker</i> ; Ru. <i>skara</i> 'mole' < * <i>a-sker</i> (cf. Ba. <i>skara</i> 'shrimp') < * <i>a-sker</i> .

Abb.: Albanian: Ba. = Banguis; Gr. = Greek; Lith. = Lithuanian; Lat. = Latin; Lth. = Latvian; OH. = Old English; OHG = Old High German; OE = Old English; ON = Old Norse; Ru. = Russian; SCr. = Serbian & Croatian; W = Welsh

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Schrijver, 'Talking Neolithic: the case for Hatto-Minoan and its relationship to Sumerian', in Kroonen *et alii* (eds.), *Talking Neolithic*, Washington 2018, 336-374

1. Individual-identifying (not: type-identifying) similarities of the verbal systems of Hattic and Sumerian point to the idea that they are related.
2. There are similarities between Hattic and Minoan (language of the Cretan Linear A texts), which may suggest that they are related.
3. Speakers of Hatto-Minoan-Sumerian are implicated in the spread of agriculture into Europe between 7000 and 5000 BC.
4. The "a prefix":

Hattic *ha=praššu=n* (*ha*=panther=obl.; hapax: KBo 37.1 Vs. 30a) 'of panther(skin)' ~ Hittite *paršana-*, Old Turkic *bars*, Tatar *pars*, Gr. *párdalis*, Lat. *pardus*, Sogdian *pwrōnk* etc.

Hattic *ha=nwa_gš=uit* (*ha*=sit'=uit, KUB 2.2.III: 20) 'throne' ~ verbal stem *ta=niwa_gš* 'sit (down)' and (verbal or nominal) *ha=niwa_gš*, *ha=nwa_gš*.

Sumerian 2nd millennium *urudu* 'copper' < 3rd mill. /aruta/ (Jagersma 2010: 61), cf. 'European' substrate **a-rud-*, **raud-* 'ore' in Germanic **arut* (e.g. Old High German *aruz*), Lat. *raudus* 'ore'.

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Thinking things through

- 'Camel' fits the profile of European substratum words with an *a*-prefix: **kVmVI* ~ **a-kmVI*
- The (East) Caucasian form is a better fit to Greek *kámēlos* than the Semitic form is:
 - It has *k* not *g*
 - One of its forms has a front vowel in the second syllable
 - Caucasian languages lack old quantitative oppositions between vowels (exception: Nax **a* ~ **a:*), so languages with quantitative vowel oppositions that borrow from them are free to manipulate quantity.
- 'Camel' differs from (most) other words with an *a*-prefix in that
 - (a) it was borrowed into IE *demonstrably* later than the Neolithic
 - (b) its geography and origin are east (Near East, Caucasus, South-Central Asia)
 - (b) it has an East Caucasian pedigree (? like **mesal-* ~ **a-ms(a)l-* 'blackbird' if cognate with ECauc. **[ɔ]m(V)ʃs(:)ɔl/n* 'partridge, grouse, Caucasian turkey', see next slide)
- Is the etymon native to East Caucasian or is it a borrowing into East Caucasian from a lost language in the steppe zone? Relevant thoughts:
 - (a) Vowel alternation of the second syllable fits in with what is known about East Caucasian (see above)
 - (b) Patterns of syllable loss that can be observed in words with an „a-prefix“ fit in with what is known about East Caucasian (see next slide)
 - So either native or, after borrowing, thoroughly nativized

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Syllable loss in East Caucasian: nominal inflection of (C)VCVC-roots

(1) Alternations preserved

Avar (loss of medial vowels, CR/RC metathesis)

Absolute	Genitive	Meaning
<i>ebél</i>	<i>ulb-úl</i>	'mother'
<i>bet'ér</i>	<i>bat'r-ól</i>	'head'

Lak (loss of initial syllable, CR/RC metathesis)

<i>barz</i>	<i>zur-ul</i>	'moon'
< *warc:	< *wi]c: r-VI	

(2) Alternations reconstructed

***wVÁVr/n-** 'beak, head'

- *wVÁVr- Avar *bet'ér* 'head', Tsez *bi'á'o* 'cob of corn', Tsaxur *wuk'ul* 'head'
- *wVÁ(Vr/n) in Lak *bak*, Dargwa *bek* 'head'
- *wVÁVr- in Tsez *bu'á'i*, Chechen *mará*, Batsbi *mará* 'nose'
- *(wV)ÁVrV- in derivatives: Avar *t'ar* G *t'aról* 'ear of corn', Tsez *á'ara* 'id.', Lak *k'ara-lu* 'pillow' (< 'under head'), Tabassaran *k'ul* 'ear of corn, head', Archi *á'il-il-á'* 'under the head'

***VmVs(VI)/n-** 'partridge, grouse, turkey'

- *VmVs in Avar *šansá*, Hinuq *izo*, Inxowar *e'zo*
- *mVsVn/- in Andi *nuc'jo*, Tindi *nus:ej*; Archi *mus:al*; also Chechen *mo:ša*, Ingush *moaš* < Proto-Nax **ma:šu(n-)*
- *(mV)VsV/- in Lak *s:ul*, Dargwa *s:u'í-l-int*, Lezgi Rutul *swal*

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