RECONSTRUCTING A CULTURAL LEXICON
FOR PRE-HISTORY: BERBER ZOOYMS OF AFRASIAN
(AFRO-ASIATIC) ORIGIN *
https://doi.org/10.31577/aassav.2022.31.1.01

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The paper contains 63 common Berber zoonyms denoting domesticated and wild animals and their cognates in various branches of the Afrasian (Afro-Asiatic, Afroasiatic, Semito–Hamitic) macro-family including reconstructed proto-forms for each branch and the macro-family. The research is based on the classical comparative and historical method relying on the established sound correspondences between the languages of every taxon.

Keywords: Berber, Afrasian, zoonyms, etymology, reconstruction, comparative and historical linguistics

The present article is part of the author’s decades-long project aiming at reconstructing the most comprehensive picture possible of all aspects of the life of Late Epipaleolithic and Early Neolithic people in the Near East and North Africa which can be derived from the reconstructed Proto-Afrasian lexicon, namely, terms referring to people and society; economic life and technology, intellectual culture; and the natural and physical environments (see, for example1,2,3). Zoonyms are an important part of this picture both for the

* This research is supported by The Russian Science Foundation (Project No. 20–18–00159); the financing organization is The Institute of Linguistics, Russian Academy of Sciences.

1 MILITAREV, A. The prehistory of a dispersal: the Proto-Afrasian (Afroasiatic) farming lexicon.
economic (hunting and the domestication of animals) and natural surroundings. For this contribution Berber zoonyms in an Afrasian perspective were selected. From the point of view of etymology, the Berber lexicon is a mixed blessing. Due to the relative genealogical proximity between the Berber languages, their common vocabulary is much easier to reconstruct compared to that of Semitic, Chadic, Cushitic or Omotic. Besides, individual idioms have been appropriately recorded by several generations of students, mainly, but not only, of the French school starting with Foucauld’s incomparable Dictionnaire. Great work on the identification of Arabisms, which make up a significant portion of the vocabulary of almost any Berber language, was carried out by Berberologists, many of whom were also professional Arabists; relatively small groups of Phoenician (possibly also Hebrew), Greek and Latin loanwords have also been identified. There are first-class comparative Tuareg studies by K.-G. Prasse and intra-Berber comparative lexicons by M. Kossmann, K. Naït-Zerrad (regrettably, first issues only), Aman Iman, M. A. Haddadou. The latter three are elaborate and very helpful synchronous matching lists of words, though intended for inter-dialectal comparison rather than comparative-historical studies; Kossman’s work following Prasse’s neogrammarian approach aims at

2 MILITAREV, A. Reconstructed lexicon for the West Asian home of Proto-Afrasians: pastoralism.
3 MILITAREV, A. Lexical Reconstruction for the Reconstruction of Prehistory: Proto-Afrasian Terms Related to Weaponry, Warfare and Other Armed Conflicts.
4 This proximity is, however, greatly exaggerated by some authors to the point of recognizing the differences between them as dialectal, which – even in the absence of clear criteria for interdialectal and interlingual differences (“language is a dialect armed with tanks”) – was a poor and counterproductive call inhibiting the development of comparative-historical Berberology as part of comparative Afrasian studies for many decades. Cf. “En linguistique berbère, il est tradition de considérer le berbère comme une seule langue. Pour répéter la formulation de Salem Chaker, la langue berbère serait une et chaque dialecte n’en serait qu’une variante régionale.” (KOSSMANN, M. Essai sur la phonologie du proto-berbère, p. 15).
5 FOUCAUD, Ch. de. Dictionnaire touareg-français.
6 PRASSE, K.-G. A propos de l’origine de Ḥ touareg (tahaggart).
7 PRASSE, K.-G. Manuel de grammaire touarègue.
8 KOSSMANN, M. Essai sur la phonologie du proto-berbère.
9 NAÏT-ZERRAD, K. Dictionnaire des racines berbères (formes attestées).
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establishing phonetic rules and regular correspondences between Berber languages, but without external parallels, it cannot replace a full-fledged comparative-historical Berber dictionary. For all the conventionality of this distinction, Berber languages are far from qualifying as a group of dialects. Lexicostatistics based on Swadesh’s 100-word list\(^{11}\) show around 50\% of cognates between the most genealogically distant languages (like any Tuareg vs. Siwa vs. Zenaga vs. any North Berber idiom) which roughly corresponds to the percentage of cognates between, say, Baltic vs. Slavonic and far surpasses the percentage of cognates between the most distant Romance, Slavic or Turkic languages. The status of a linguistic family with a chronological depth of about 3,000 years\(^{12}\) actually cries out for the comparison of reconstructed Proto-Berber lexemes with non-Berber Afrasian data relying on the established regular correspondences in consonants\(^{13}\) and a comprehensive \textit{ad maximum}, fairly organized Afrasian etymological database with a convenient search function without which non-systematic, impressionistic comparison often proves to be inaccurate or outright wrong.\(^{14}\)

\(^{11}\) Recently transforming from “a controversial method” into one half-accepted by the linguistic mainstream.

\(^{12}\) See our differences – not particularly fundamental – with Václav Blažek on the question of measuring the time depth of the Berber family, in other words, dating the Proto-Berber language in \textit{MILITAREV: A. Libyo-Berbers – Tuaregs – Canarians: Linguistic Evidence}.

\(^{13}\) Correspondences in vocalism are still a weak point in the Afrasian comparison: the vocalic elements in the AA proto-forms in the present paper are rather tentative. It is to be noted, however, that in Afrasian comparative linguistics, by contrast with, say, the Indo-European one, matching of vowels, unlike consonants, plays practically no role in establishing word relationship. Of course, reconstruction of vowels is indispensable, among other reasons, for reconstructing the sounding, the “phonetic image”, of the proto-forms, but not for etymology, in which it is of little help. On the contrary, consonant correspondences between the main AA languages – the work started over 40 years ago by Igor Diakonoff’s team (of which the present author was one of the active participants) – are regular and quite reliable, serving as a solid base for the step-by-step reconstruction of proto-forms at the PAA and each branch and group level.

\(^{14}\) Missing the mark by hitting a “variant root” is quite common due to the considerable reduction of the Berber consonant system in comparison with the reconstructed PAA one, and the merging in Berber of two or more AA consonants, especially in the laryngeals and sibilant affricates area; another, and perhaps, the trickiest, issue in Berber-AA comparison is the case of Aujila and Ghadames *b irresolvable without external comparison (in some cases irresolvable even \textit{with it}); for details see footnotes 42 and 81.
Such a database was compiled between the end of the last century and the latter part of the first decade of our century by O. Stolbova and myself (in the first years, within the framework of the Santa Fe Institute’s project “Evolution of Human Languages”) and later further worked on by the present author. At present it contains over 4,000 entries in the main Afrasian etymological base (liable to strong reduction in the final version, of course) and some 15,000 entries in the subordinate bases, connected with the main one.

Conspicuous lack of a comprehensive comparative and historical or etymological Berber dictionary is to some extent compensated by numerous disparate etymologies in the works of such Afrasianists as Aharon Dolgopolsky (†), Olga Stolbova, Václav Blažek, Gábor Takács, and the present author; there are several etymological articles devoted to a specific group of Berber lexemes, such as kinship terms, ‘year’ or the basic lexicon. Some of the etymologies presented are quite convincing, some are debatable or even far-fetched, but in general they rely on the basic principles of the classical comparative and historical method in linguistics and correspond to the current level of comparative Afrasian studies.

\footnote{The version dated April 2007 is available from https://starlingdb.org. According to the description, “Compiled by Alexander Militarev and Olga Stolbova on the basis of multiple published sources as well as constantly on-going newer work. Both the main Afroasiatic database and all of the numerous subordinate databases are in a state of near-permanent construction, containing much raw data that still has to be polished, but nevertheless, the database even as it is is a considerable improvement on previously available etymological dictionaries. Subordinate databases include files with Semitic, Berber, Egyptian, Cushitic, and Chadic data (the latter courtesy of O. Stolbova, most of the others supported by A. Militarev).” To this somewhat outdated description I would add Omotic. The words “in a state of near-permanent construction” explain why “the final version” is still not posted on the Internet.}

Stolbova has in recent years been busy compiling a comprehensive Chadic etymological database (available from https://book.ivran.ru/f/ilovepdfmerged.pdf) – up till now the only basically successful attempt to enter mass lexical material of over a hundred Chadic languages into the Afrasian comparative studies based on regular consonantal correspondences established mostly by Stolbova and convincing or plausible etymologies.

\footnote{BLAŽEK, V. Toward the Berber kinship terminology in the Afroasiatic context.}
\footnote{BLAŽEK, V. Berber year and its seasons.}
\footnote{MILITAREV, A. Историческая фонетика и лексика либио-гуанческих языков [Historical phonetics and lexicon of the Libyo-Guanche languages], pp. 250–265; BLAŽEK, V. On application of glottochronology to Berber languages: East Berber branch; BLAŽEK, V. On Application of Glottochronology to South Berber (Tuareg) Languages.}
This article is devoted to Berber zoonyms and their Afrasian etymologies. The author did not set himself the tasks of presenting either a complete set of common Berber animal names or the reflexes of a particular Berber proto-form in all Berber idioms; or to delve into the combinative intricacies of Berber vocalism. The task was, first of all, to establish the continuity of Berber zoonyms from the common Afrasian ones. The consonant correspondences between Berber and other Afrasian branches relying on Militarev Историческая фонетика и лексика ливийско–гуанчских языков [Historical phonetics and lexicon of the Libyan-guanche languages] were developed by the author in the course of his work on the comparative AA dictionary in the team headed by I. M. Diakonoff and mainly accepted, further specified and tested on a considerable lexical material chiefly in the studies by Stolbova, Blažek, Takács and the present author. The consonantal correspondences between the Afrasian branches are based on the team work by Diakonoff and his group and subsequent studies by all the above-mentioned authors, and within each of the branches and subbranches, on the works by the same and many other linguists.

The choice of this semantic field is accounted for, on the one hand, by the fact that zoonyms represent important segments of cultural and environmental vocabularies including biocenosis and food acquisition (hunting, fishing, and domestication of animals); on the other hand they are one of the best – if not the best – studied groups of Afrasian vocabulary to date. In addition to several papers by Blažek (e.g. 22, 23, 24), SED II, 25 where Afrasian cognates were provided

20 That is why such zoonyms as Berber *(a-)*bidd-aw (Ghadames biddu, Ahaggar a-biddau) vs. Proto-Chadic *bid- ‘(red/patas) monkey’ (STOLBOVA, O. Chadic lexical database. Issue VI, #42) are not omitted in my paper, but deliberately not included. I usually do not include Berber terms having cognates in Chadic only as they may not represent a common inherited Afrasian term, but be a result of borrowing, which is exactly the case: the Berber words are undoubtedly Chadic loanwords.


22 BLAŽEK, V. Fauna in Beja Lexicon (with comparative AA material).

23 BLAŽEK, V. Simiae.


for some of the common Semitic animal names, a few more papers addressing Proto-Afrasian zoonyms have been published.26,27

The data

Domesticated animals

Dogs


< AA *ʔayd– ‘dog’.28

Chad. *ʔayd– ‘dog’: W.: Bolewa, Ngamo ḥądà, Kirfi (pl.) ḥeddiŋi, Diri àddà, Guruntum dâ, Gera yadâ, Mburku diyà; C.: Tera yida, Gude ʔidda, ḥaddâ, Zime–Batna ħḍà, Marba ḥidi, Ngíde ħidâ, etc.29

(?) Sem.: Aram. Syr. yadnā ‘hyena’30

Cush. S.: Ma’a ḥid’e (met.) ‘dog’ (though marked in various sources as a loanword, matches well the AA root).


26 MILITAREV, A., NIKOLAEV, S. Proto-Afrasian names of ungulates in light of the Proto-Afrasian homeland issue.

27 MILITAREV, A., NIKOLAEV, S. Proto-Afrasian names of non-ungulate animals in light of the Proto-Afrasian homeland issue, No. 19/4.

28 The main common Berb. term for a dog and etymologically a very entangled case. For Chadic, Stolbova reconstructed two variant proto-forms: *hid–/*hadd– and *ʔaḍ–, the second one having such a striking affinity with the Berber forms that it made her suspect a loan from Berber. The opposite direction of borrowing – from Chadic into Berber – is also a possibility. The remaining explanation is a common Berb.-Chad. term with two isolated external matches: Sem.: Syrian yadnā ‘hyena’ and S. Cush.: Ma’a ḥid’e ‘dog’, both problematic in their own way but both pointing to *ʔ–, not *ḥ– (should then the Proto-Chad. term with *ḥ– be treated as a variant root?) and –d, not *ṭ while –ḍ instead of –d in some of the Berb. singular and nearly all plural forms as well as Chad. forms remains enigmatic. In any case, whether borrowed from Chadic into Berb. or vice versa, the PAA origin is highly questionable.


30 COHEN, D. et al. Dictionnaire des racines sémitiques ou attestées dans les langues sémitiques, 1145. Forms with the suffixed –n are current in Semitic animal names.
   < AA *ʔa/usk–ay ‘kind of canine or hyena’:
   Cush. E. *se(H)ek–: Yaaku seek–a ‘hyena’

   < AA *kur–ay– ‘dog’:
   Chad. *kuray– ‘dog’: W. *ku/aray: Hausa kâr–e, Zaar kâraγ–i, Guus kârγ–, Bokos kēr–a; C. *ku(ʔ)ar(ay): Fāli–Kiria kâr–i, Hīgi kūr–ē, Hīlī kr–i, Lamang kēr–e, Gisiga kor–e, Dugwor kūr–ā, Sukun kr–a, etc.54
   [] Attested in Africa only. AADB 375; CED #455, HSED 1434. Cf. Kanuri keri, Teda kedi ‘dog’.


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31 Cf. STOLBOVA, O. Chadic lexical database. Issue III, #187: only Chad.
32 Cf. also wāksak ‘fox, jackal’.
33 Cf. also Ahaggar abaykōr, Ayer, E. Tawlemmet abaykor, Adghaq abaykor ‘chien de mauvaise race’, Ghat abaykur ‘lévrier’ (I analyze it as *ab–ykar, a composite word, something like ‘non-dog, under-dog’: *wiba, negation and *a–ykar ‘young dog’).
34 < *kVr– in CED #455.
35 Cf. Saho wakari, Afar wākri ‘jackal’.
36 Cf. also a–yorzal ‘chien’.
37 Cf. KOSSMANN, M. Essai sur la phonologie du proto-berbère, #749.
< AA *KVzim– or *KVžim– ‘dog’.38
(?) Chad. C. *kazim: Bura kazim ‘a male baboon, monkey, or dog’
Egyp. (MK) žm (< *KVžVm– or –ž–) ‘dog’
Cush. C. *g/kayžim– (ŋ) is < *–m) ‘dog’: Bilin gidŋ, pl. gžiŋ, Khamir gžiŋ, Khamta gɔɔŋ, pl. gɔɔŋ, Qwara gezen, Qemant gɔɔŋ, Kailiŋa gɔɔŋ, Waag gizim, Falasha gəziŋ; Aungi gəziŋ, Kunfäl kassŋ.
[] Attested in Africa only. AADB 2699.

Ungulates
Small cattle

Ahaggar a–bağūŋ, pl. i–bağūŋ ‘agneau’, Ayr, E. Tawllemmet a–bągog ‘jeune mouton de 2 à 3 ans’ (cf. Nefusa bůu, pl. i–bůi–in ‘calf’)
< AA *bag(g)V–  ‘(young) small cattle’:
   E.: Sibine bàge (pl.) ‘she-goat’
   Sem.: Eth. *bag(g)i– ‘sheep, ram’: Gz. baggoʃ, Tna. bagiʃ, Tgr. bagguʃ, Amh. bąg, Arg. bągi
   Cush. C.: Bilin baggəŋ, Khamir begaŋ, Khamta bigaŋ, Qwara, Qemant baga ‘sheep’
   Omot. N.: Kafa bagiŋ, Mocha bągo, Bworo baggo ‘sheep’.39
[] Attested in Africa only. AADB 2459; cf. HSED: 44; DOLGOPOLSKY, A. Nostratic Dictionary, 185; STOLBOVA, O. Chadic Lexical Database. Issue VI, #85.

38 In spite of the variation of consonants – probably due to tabooing – both within Berber and Agaw and between the AA branches, all the quoted forms are hardly unrelated (this is the comparison which may be labelled “impressionistic” but is worth considering all the same). The AA term is still more intriguing if compared with the Proto-North Caucasian *kwače (> Proto-Andi *gwantiago) ‘dog’ (MILITAREV, A., STAROSTIN, S. Описание афразийско–северокавказская культурная лексика (Afrasian-North Caucasian cultural terms), p. 259).
39 With their stable root vowel a and reduplicated –g– in some of the forms, part of them may represent a chain of loanwords, or a Wanderwort, rather than a common Afrasian zoonym. According to some authors, the Eth. terms are borrowed from C. Cush., while according to others it is vice versa; the lack of non–Eth. Sem. cognates would point either to the borrowing from Agaw (note, however, that the Agaw terms are isolated in Cush.) or N. Omot., though, also poorly represented in one subgroup only.
> AA *ba/ukir ‘kind of (young) small bovid’.
(?) Sem.: Amh. bokor (<*bokor) ‘reedbuck’
[] Attested in Africa only. AADB 2500. Cf. SED II No. 56.

7. Berb. *balVy ‘ram’ (pl.): Gurara, Tuat, Tidikelt, Timimun bellì ‘moutons’
> AA *bawil ~ *wabil – *(ʔ)–m–bVl ‘ram, goat’.
Chad. *(m–)bil– and *(m–)balaw/y– ‘small cattle’: W. *m–bil–: Geji mbil–a ‘sheep’; C. *bVlaw–: Matakam bəlaw ‘race de mouton sp.’; E. *balVy–: Lele bulobulo (reduplication) ‘he-goat’, Kabalai bål, Migama bəlíy–ò, Sokoro bal ‘goat’
Egyp. (OK, MK) ib/w (very likely < *ʔVbVl– or *yVbVl–) ‘Mähnenschaf (Ovis tragelaphus)’

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40 This Berb.-Chad. root is included as an exception because of its possible provenance from AA *bkr ‘to be early / firstborn’ (see discussion in SED II No. 56).
41 All forms with –g– are likely due to the voicing of *–k– in an intervocalic position with a voiced stop in the C₁ position (see CED, p. 38).
42 Infantile words and, according to TAKÁCS, G. Etymological Dictionary of Egyptian. Vol. 2, p. 24, “therefore cannot be considered”; which is an arguable tenet. Cf. also *belbel (reduplication; perhaps descriptive) ‘crier, béler (bouc)’: Nefusa belbel, Mzab bbelbel, etc. (NAÎT-ZERRAD, K. Dictionnaire des racines berbères (formes attestées), p.: 54). However, there is an alternative etymology excluding Gurara, Tuat and Tidikelt bellì but, instead, including Audjila te–bel and Ghadames ta–hali ‘brebis’ together with Nefusa t–il, Zenaga t–ij, Ahaggar té–helé, Ghat ěr–hali, Ayr t–ele, E. Tawllemmet. te–holé, etc., the proto-form reconstructed as *hVli ‘sheep’, tentatively related to AA *hay–l ‘kind of lesser bovid’ (below). The equally probable decision depends on the much-discussed but still unsettled issue of the interpretation of Berb. *h yielding Audjila and Ghadames h (conveyed by some authors by β, v or f) and Tuareg h as *b (probably in contact with a laryngeal) or as a laryngeal/pharyngeal (probably labialized – conventionally *H). Apparently, in every individual case, an etymological choice depends on the suggested AA parallels, which sometimes allow for both decisions. For a similar case see Fn. 81. For a detailed discussion see TAKÁCS, G. Studies in Afro-Asiatic Comparative Phonology: Consonantism, pp. 88–103.
Sem. *w/yābil– ‘ram’; Phoen. ybl, Hbr. yāḇēl; Aram.: Dem. yābl, Jud. yāḇēl– ‘ram’; Arab. wābil–at– ‘petits chameaux ou agneaux; petits d’un troupeau composé de chameaux ou de moutons’


[] AADB 2484; SED II No. 245; cf. MILITAREV, A. Reconstructed lexicon for the West Asian home of Proto-Afrasians: pastoralism; MILITAREV, A., NIkolAev, S. Proto-Afrasian names of ungulates in light of the Proto-Afrasian homeland issue, #1.6. (*balay/w– ‘kind of lesser bovid’).


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44 NICOLAS, F. La langue berbère de Mauritanie, p. 156.
Chad. C. *g"ar– and *g”arg”ar– (reduplication) ‘ram’: Hursa gorgor–a, Užam gwar–a, Matakom n–gwar, Ouldem g“ar–à, Mbuko g"arg"ar–à, Meray g"arág“ar–à, Muyang g"öróg“or–à, Mada gurg“ar–a; E. *gagar– (reduplication) ‘small cattle’: Sok gaïger–o ‘Schaf’, Mawa gagar ‘mouton’, Mubi wegr–i (met.) ‘chèvre’.

Sem. *(ʔa–)gurr–: Akk. (MA) gurr–at-u, agurr–at-u ‘ewe’


< AA *ʔayl– ‘kind of lesser bovid’:


< AA *haw/yr– ‘kind of small bovid’:


gazelle’; Omot. N. *guHar–: Wolayta, Dawro gaar–aa ‘antelope dekula’ (probably a loanword < Sidamo).

47 Cf. KOSSMANN, M. Essai sur la phonologie du proto-berbère, #65.
48 Cf. Ahaggar, E. Tawllemmet a–hîar ‘faon de gazelle’.
Sem.: Arab. 

**hawr** – ‘très grand troupeau de moutons’


[ ] Scarcely representation in the non–Berber branches. AADB 2128.


< AA ***jaw/yt–** ‘sheep, goat’,

Chad.: W.: Bokkos **tiwi** (met.?) ‘sheep’; E. ***ʔataw** (met.) ‘she–goat’:

Sokoro **atu**, Nanchere, Lele, etc. **tū**, Modgel **tō**

Sem.: Modern Eth. ***lay\(\mathrm{W}Vt–***: Tigre **läyot** ‘Ziege, Zicklein’, Gogot **wat–ən̩nä**, Chaha **wat–ən̩nä**, etc. ‘the young (male) of a goat or a sheep’

Cush. S.: Qwadza **aʔat-o** ‘sheep’

Omot. S.: Hamer **yatt** ‘sheep’

[ ] AADB 2483. Attested in Africa only.


< AA ***kaw/yr–** ‘young (small) bovid’;


Sem. ***ka/irr–** ‘small cattle’: Akk. **kir–r** ‘a breed of sheep’; Ugr. **kr** ‘ram’

Hbr. **kar** ‘(young) ram’


50 The glottal stop ʔ, unstable in Berb. as in many other AA languages, is rendered in some cases as h, and falls in others.

51 Reconstruction phonetically problematic because of only one “hard” root consonant.
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< AA *wa-nil ‘kind of bovid’:


[] Cf. AADB 2634; SED II No. 92.


< AA *yuzal– ‘kind of young bovid’:


[] Cf. AADB 2634; SED II No. 92.

15. Berb. *(i–) zm(V)mVr ‘ram, lamb’: Ghadames a–žūmer (z is hard to explain), Fodjaha zamār, Siwa i–zmār, Semlal, Izayan i–zmār ‘ram’, Snus, Shawiya i–zmār, Qabyle i–zmār, Zenaga a–žumu ‘lamb’, etc.

< *VmVr– ‘kind of bovid’:

(?) Chad. C.: Ouldem zêmelmèl (akin *zmVr/–) ‘oryx algazel’ (isolated, questionable)

Sem. *zamr–: Ugr. zmr ‘antelope’ (not fully reliable); Hbr. zāmār ‘kind of gazelle’; (?) Arab. zmr ‘s’enfuir (se dit d’une gazelle)’
Cush. S.: Dahalo ūjmūr ‘male waterbuck’.
[] Poorly represented outside of Berber. SED II No. 253; AADB 2662.

Large cattle

< AA *birak– ~ *kabir– ‘large bovid’:\54
(?) Egyp. (NK) bū ‘milk cow’ (if < *bVkVr– with metathesis and unless < bē ‘be pregnant’)
[] Attested in Africa only. AADB 2535; 400.

< AA *hay/wr– ‘kind of larger bovid’:
Sem. *haw(a)r– ‘bull, cow’: ESA: Sab. ḫwr–y, Hdr. ḫwr, (?) Min. ḫwr ‘cow’; Arab. ḫawr– ‘taureau’ (see SED II No. 106)
[] AADB 4120, 380; cf. STOLBOVA, O. Chadic lexical database. Issue V, #224.

Pigs

18. Berb.–Canarian *(H)ilf– ‘hog, pig’: Semlal, Figig, Shawiya, Qabyle, etc. iləf; Gran Canaria, Fuerteventura, Lanzarote ilfe
< AA *hVlp– ~ *IVph– ‘hog’:
Egyp. (20th Dyn.) ipḫ ‘pig’ (<*IVpVh, met.)

\54 Whether these two triconsonantal roots with the radicals of the same quality and the same meaning are to be regarded as metathetic variants of the same root or two independent roots is a purely scholastic question.
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Sem.: Arab. ḥallūf – ‘hog, pig’

[] Cf. also Beja hallūf ‘hog’ which must be an Arabism. AADB 2647; WÖLFEL, J. D. Monumenta linguae Canariae, p. 492; cf. TAKÁCS, G. Etymological Dictionary of Egyptian, Vol. I, p. 89. A somewhat “enigmatic” term with metathetic reflexes (probably accounted for by a kind of tabooing), though undoubtedly connected.

Odd-toed ungulates


(?) < AA *baɣ/kīl – ‘kind of odd-toed ungulate’:

Sem. *baɣ/kīl – ‘mule’; Sab. byl; Arab. baɣl–, baɣɣāl–; Gz. bākl, Tna. bākl–i, Tgr., Har. bākāl, Amh. bākt–a; Mhr. bāyl–ēt, Hrs. bēyel–ēt

Cush. N.: Beja baɣāl, bāgl–a ‘Maultier, –Esel’ (according to Reinisch, a loan from Eth.); C. *ba/iḳl – ‘mule’: Bilin baql–a, Khamir biql–a, Kemant (pl.)

55 Not in classical Arabic; according to COHEN, D. et al. Dictionnaire des racines sémitiques ou attestées dans les langues sémitiques, attested in Egyptian, Maghrib, Chadic, Maltese and N. Arabian Arabic. Could these terms be loans from Berb. (which is hardly so in the case of N. Arabian Arabic)?


57 This is one of the most debatable Semitic zoonyms (see discussion in SED II, No. 55) with a lot of conflicting hypotheses trying to explain the irregular correspondence y vs. k (and even g) by various borrowings; the irregular Cushitic parallels considered by some authors sources of the Eth. terms confuse the issue still further. The Berber terms fit well phonetically while their meanings make borrowing from Arabic unlikely, rendering the idea of a PAA origin of some odd-toed ungulate (far too early for a mule, of course, attested to much later) plausible.

58 There are also Aram.: Syr. baɣl–, baɣl–a, Mnd. bagal, Turoyo baɣl–o commonly recognized as Arabisms.

59 According to APPLEYARD, D. A Comparative Approach to the Amharic Lexicon, p. 25, the Eth. forms are “almost certainly of Cushitic origin”.

15

[1] AADB 2537; SED II No. 55; cf. BLAŽEK, V. Fauna in Beja Lexicon, p. 5.

20. Berb. *(H)abal*60 ‘(young) camel’: Ghat abal ‘chameau en âge d’être monté’, Ahaggar ābal, pl. ābal–ən ‘jeune chameau’, t–ābal–t ‘chamelle de selle d’âge quelconque.’, Ayr abal, pl. abal–ān ‘chameau noir et court d’une race particulière’ (also ‘autruche mâle’)
   < *qabil– ‘camel’.61
[1] Cf. SED II No. 2. AADB 2509.

   < AA *ʔa–gil– ‘kind of equid or camel’:

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60 While a direct borrowing from Arabic into each of the Tuareg idioms (not into Proto-Tuareg, of course) can obviously be suspected, the vocalism of the Tuareg forms rather speaks against it.
61 Though the PAA whose split I date to the mid-11th millennium seems too early for a camel, according to some authors (PROTHEO, D., SCHOCH, R. M. Horns, Tasks, and Flippers: The Evolution of Hoofed Mammals, pp. 53–4), ancestors of the dromedary occurred in the Middle East and northern Africa as early as by the Pleistocene. A series of dromedary sculptures found in the Saudi Arabian province of Al–Jawf was dated recently between 7,000 and 8,000 years old while in Somalia (in Laas Geel meaning ‘well of camel’ in Somali) there are paintings of dromedary dated from 5,000 to 9,000 years ago.
62 Arguably commented on in SED II No. 2 as “reliably attested in the Arabian area only, which makes its Common Semitic status doubtful” contra COHEN, D. et al. Dictionnaire des racines sémitiques ou attestées dans les langues sémitiques, p. 3.
63 Acc. to SED II No. 2, a late literary term of limited frequency and hardly genuine in Akkadian – see discussion in BRINKMAN, J. A., CIVIL, M., GELB, I. et al. (eds.). The Assyrian Dictionary of the Oriental Institute, the University of Chicago, i, p 2.
'Reitesel' (SODEN, W. von. Akkadisches Handwörterbuch, p. 15); (?) Arab. ǯawl—‘troupeau nombreux de moutons, de chevaux, de chameaux’; Tgr. g oglál, Tna. go gál ‘foal (mule, horse)’, Amh. go gl ál ‘the young of domestic animals (goat, sheep, horse, donkey)’


Omot. N. *gál(t)—‘camel’: Wolaita, Dache, Zaisse gaal-e, Yamma gaal-a, Kafa gall-o, Dizi (Sheko) gaal-e (<HEC?).

[] AADB 2508. Note a mixed term for ass and camel.


< AA *hu/ig–an/m—‘kind of odd-toed ungulate’;


[] AADB 2461. Another mixed term for equids and camel, cf. 19 (?) and 21.


< AA *(ʔV)hi/ull– ‘young odd-toed ungulate’;

Sem.: Akk. (OB) ililay–u ‘ein Kamel?’; Tgr. hele ‘camel (poet.)’, Tna. hawla ‘donkey’s colt or foal of about two years’; Hrs. me–heley–ōt ‘she-camel with fully-grown young’

Cush. E.: LEC: Rendille ēhel, Arbore holl, Dasenech ʔuol ‘donkey’ (Heine Rend. 215); Dullay: Gollango oll–ō ‘Pferd’; S.: Dahalo helleʔ-疹 ‘zebra’

Omot. N.: Zaisse oll–ō, soll–ō, Ganjule oll–o ‘horse’ (<*hawl–, possibly a loanword from Dullay, or <*tawl–)

[] AADB 2462. Another mixed term for equids and camel.

54 Cf. KOSSMANN, M. Essai sur la phonologie du proto-berbère, #207.

< AA *kawr– and *kirkar– (reduplication) ‘wild ass or camel’:
Sem. *kirkar– ~ *kurkár– (reduplication) ‘she-camel’: Hbr. kirkár–á́t ‘she-camel’; Hobyót kóok (part. reduplication) ‘female camel (from 2 to 3 years)’

[ ] AADB 2468. One more mixed term for donkey / wild ass and camel.


< AA *kalVk – ~ *Vkum– ~ *kalVm– ‘camel’:
(?) Chad.: W.: Hausa râkûmî, Karekare žûkûmô, Warji lâkûmâi, Miya lâkûmî, Mburkû lâkûmî, Diři raqûmî, Tsagu raqûmî, râkwâmî, Jimbin rakûmûta gâŋ (all the North Bauchi forms are considered loanwords from Hausa), Ngizim žûgûmâu, žûkûmâu ‘camel’; C.: Bura likâmo, Dghwede lûgwâmâ, Kotoko lûgwâmâ, Daba žogo, Lame žûgwâmâ ‘camel’, Mbara lûkûma ‘camel, horse’; E.: Ndâm lûkmâ, Kwang lûkûmâ, lûgûmâ, Migama lûkûmo, etc. ‘camel’, Kabalai lakûma ‘horse’ (irregular reflexes: *l > r and ž, *k > g rather point to borrowing – most likely < Berb.)

Sem.: Arab. ʕalī–at– ‘chamelle menée en laissé’ (cf. Mhr. ʕalîg ‘camel-calf about two years old’, Jib. ʕizîg, dim. ʕâlgên ‘2-4 year-old camel’).
Cush. E.: LEC *(a)aıl–îm–: Somali qaalîm, pl. qaalîmo, Rendille haalîm ‘young female camel’ (note similarity with the Tuareg forms).

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65 Note a striking resemblance between the Tuareg and Hebrew terms.
66 Perhaps related is Arab. kurr– ‘ānôn, poulaîn’ (COHEN, D. et al. Dictionnaire des racines sémitiques ou attestées dans les langues sémitiques, p. 1283). What is surprising is the very fact of the mixed terms for equids and camel (see 19, 21, 22, 23, 24). What could unite them in the minds of the PAA speakers? It’s too early for a pack animal function...
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[ ] AADB 2596. Unless a common AA term with varying root consonants and metathesis due to tabooing, a chain of borrowing from Arab. > Berb. > Chad. and, apparently, LEC (< Tuareg?) accompanying the introduction of the domesticated camel from the Arabian Peninsula to Africa.

< AA *شَرَدَ (‘wild) ass’:
Sem. *شَرَدَ (‘wild) ass’: (?) Akk. arād–u, ḫarād–u (< Aram.?)
Hbr. שָרָוד; Aram.: Syr. شَرَد–א, Mand. arada ‘wild ass’; Arab. شَرَد– ‘âne’

Mixed terms for ungulates

< AA *سَرَوْي– ‘kind of bovid’:
Chad. W. *سَأْرِسَار– (reduplication): Hausa سَأْر–أ ‘male red-fronted gazelle’
   Egyp. (OK) سُ (if < *سَوِ)– ‘Herde’
   Cush. E. *سَأْرَ(آ)و– and *سَأْرَ: Saho سَأْر–إ ‘two-year-old bull’,
   LEC: Somali سَرَي–ان ‘adult male oryx’, Dullay *سَأْر– ‘dik-dik antelope’;
   Gollango سَأْر–أ, سَأْر–ان ‘male red-fronted gazelle’
   Saho سَأْر–أ ‘two-year-old bull’.

Poultry

< AA *کْوَي– and *کْوَاکْم– ‘kind of gallinaceous bird’:
   Chad. (a) *کْوَاي–: W. *کْوًاي–: Gwandara كَوْي، Sura كَوْي، Angas كَوْي ‘hen’,
   Guruntum كَوَاي–أ 'cock’;
   C. *کوْي: Buduma كَوْي–َي ‘partridge’;
   (b) *کْوَاکْم– (reduplication): W. *کْوَاکْم–: Dera كَيْوَك ‘goose’, Fyer كَعْوَك– ‘hen’;
   C. *کوْک–: Gulfei كَوْك ‘hen’.


[] AADB 325. Cf. SED II No. 123; BLAŽEK, V. Fauna in Beja Lexicon, p. 261. By placing this root with the domesticated animals, I do not claim that the domestication of birds occurred in the Proto-Afrasian era, although a few PA zoonyms allow such an interpretation.

Wild animals
Monkeys


< AA *dang(ʷ)Vl/r– ‘monkey; dwarf’

Chad. *da(n)g(ʷ)–ir/l–: W.: Hausa gand–i (met. < *dang–) ‘pigmy’; C. *da(n)g–il/r–: W. Margi dagil, Chibak dakil (devoicing of *–g?) ‘monkey’, Gude dāngwar–ā ‘adult male of an erd monkey’, Dghwede gāndāw–ā (met. < *dangw–). Buduma dāgel; E. *di(n)g–Vr–: Ndam gōgēm dōgré. Dagla gūdīn–ā (metathesis < *dīngw–) ‘monkey’

Egyp. (OK) dng, d(ʷ)g (< *dlg), d(ʷ)ng (< *dlng, metathesis of *dVngVl–?) ‘dwarf’

(?) Sem. *duggal–: Arab. duẓẓal– ‘vil, bas, de basse classe (hommes)’ (semantically arguable); Tna. donki, Amh. denk ‘dwarf’ (< Oromo).


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67 Borrowing from Chad. not to be ruled out.
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[] In the meaning ‘monkey’ attested in Africa only. AADB 38, 392; BLAŽEK, V. Simiae. Cf. Kordofan Nubian: Dair tigil, Koldegi tingel, Midob tanni ‘monkey’ (ibid., apud Meinhof) and Saharan: Tubu dęgol ‘ape’ (ibid., apud Lukas).

Ungulates


< AA *naʔir– ~ *Arn– ~ *ʔran–70 ‘kind of antelope’:


< AA *bəray– ~ *bəray– ‘young of any bovid’:

Egyp. (OK) bꜣ ‘heiliger Bock (ovis longipes palaeo-aegyptiacus)’, Copt.: Fayumic bar–it, Boheiric barh–it ‘bouc’ (–h– is not clear).72


69 Cf. KOSSMANN, M. Essai sur la phonologie du proto-berbère, #28.
70 Metathetic variants are probably accounted for by the hunting taboo.
71 Cf. also Ghadames əbbur ‘agneau’ in CALASSANTI-MOTYLINSKI, A. de C. Le dialecte berbère de R’edamès, p. 99 (not in LANFRY, J. Ghadamès. II. Glossaire).
72 ~r– in Faumiyc points to *~–r– rather than *–l–, though, acc. to TAKACS, G. Etymological Dictionary of Egyptian. Vol. 2, p. 23, it is “most probably, < *bꜣ”.
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   < AA *damaʔ/y– ‘kind of bovid, antelope’:
   Chad.: W.: Mburku dumun ‘duiker antelope’; C. *di/um(m)–: Masa dimi, Afade dūmmo, Makeri dīmmu, Gulfei dumu; E. *dVma: Sonraii demai, Tumak dīmā ‘sheep’

   < AA *(ʔa–)dury– ‘kind of bovid’:

Egyp. (OK) idr ‘Herde (von Vieh und Geflügel)’
   Sem. *(ʔa–)dury–: Akk. dudrū ‘sorte de mouton’ (partial reduplication); Arab. diry–ʾān–at– ‘espèce de taureau’; Tgr. (pl.) ḵaddari–t ‘dwarf-antelope’


< AA *wad– ‘(wild) sheep’;

Sem. *wad–: Arab. wad–ān– ‘mouflon’ 73

[] Cf. Sum. udu ‘sheep’. AADB 2531.


< AA *jaʔVm– ‘kind of bovid’;
Chad. W. *zm–kwar– ‘hartebeast’: Kariya zuŋa–kwar, Jimbin ĵima–kwan; C. *ʔVm– ‘ram’: Mofu ġzām, zem, Balda ġzém, ġzêm, etc. 75

(? ) Sem.: Arab. zaʔVm–at– ‘boeuf ou vache’
[] AADB 2663.

Largest herbivores


< AA *ʕlw– ‘elephant’ 76


73 Cf. also miscellaneous terms that are somewhat similar and probably eventually related: Sem.: Akk. (lex.) dūd-u (< *dawd–, partial reduplication?), (OA, SB) a/etūdu ‘wild sheep (male)’, Off. Aram. (hapax in Frāh) ʔndwt (<*ʔ–n–dawt?) id. (cf. SED II No. 44).

74 Also related is Berb. Tuareg *a–wzim ‘faon de gazelle’: Ahaggar ā–whim, Ghat, Ayr, E. Tawllemmet a–wzim [PRASSE, K.-G. A propos de l’origine de H touareg (tahaggart), #635] (a relict diminutive from*i–zamm–?)

75 STOLBOVA, O. Chadic lexical database. Issue III, #489.

76 Compared in BLAŽEK, V. Elephant, Hippopotamus and Others: On Some Ecological Aspects of the Afroasiatic Homeland (passim) to Cush. E. Somali wiyil, etc. and S.: Dahalo wāla ‘rhinoceros’ which is arguable as AA *ʕ yields ŋ both in Somali and Dahalo.
Sem.: Akk. 𒀭 (elû) ‘bull (as a mythological being)’, ‘The Bull (of Heaven)’ (can be < *galw/y); Syr. ʿašlā ‘unicorns, rhinoceros’; Tgr. ʿωw ‘young of the elephant’ (three metathetic variants)

[] AADB 2511.

Canines


< AA *baggay- ‘kind of wild canine or hyena’:

Chad. C. *ba(H)gay ‘hyena’: Dghwedè bāggā (dissim. < *bagg–?), Gulfei baga, bega, pl. begaI, Logone boga, ḥāgā, pl. ḥāgay

Egyp. (NE) ḥg ‘Name eines beissenden Tieres’ (meaning not specified).


< AA *ḳašč– ‘kind of canine; hyena’:

Sem. *ḳaši– (< AA *ḳaĉ–): Arab. ḳašī– ‘hyène mâle’ (also ‘caméléon’); Jib. ṛeš-t ‘wolf’

Omot. S.: Hamer ṭaski, Ongota ṭasket, kaski ‘dog’ (likely a lw. < Hamer or vice versa).

[] AADB 2698. Correspondences unclear, not fully reliable.


< AA *wahr– ‘kind of canine or hyena’:

Egyp. (late) ṭhrt ‘Hündin’ (prop. name), Copt. ṭhur ‘dog’

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77 NAIT-ZERRAD, K. Dictionnaire des racines berbères (formes attestées), p. 856, placed under *gwr, though in FOURCAULD, Ch. de. Dictionnaire touareg-français, p. 480, the grapheme # usually transliterated as gg is used; in the Ahaggar tīfīnav it renders the voiced stop ţ originated from *-gg̚ < *-ww < Proto-Berber and Proto-Afrasian *w(w) and thus opposed to the voiced velar spirant ţ (rendered by T) < Proto-Berber and Proto-Afrasian *g. There are also the somewhat enigmatic Senhadja ṭ–uhar, Ait Tuzin ṭ–whar, Ait Warain uhar, etc. ‘fox’ formally well compatible with this root but containing a laryngeal normally lost in North Berber. (cf. KOSSMANN, M. Essai sur la phonologie du proto-berbère. # 5.14).
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[] Attested in Africa only. AADB 3189. Cf. STOLBOVA, O. Chadic Lexical Database. Issue VI, #153 where this root is glossed as ‘jackal’. Cf. Sum. ur-gi, ur.ki ‘(male) dog’ (gi, gi7, ki ‘male, man’).

40. Berb. *wVššin (met.) ‘jackal’: Fodjaha uššın, pl. i–wušš–ən, Ghadames weššin, Qabyle, Nefusa uššın, Semlal uššın, etc.
< AA *wa(n)s– ‘kind of canine’:
  Egyg. (OK) wnš ‘wolf’
  Omot. N. *wayši: Haruro wayše, Mao (Hozo) wiši, (Sezo) wiš(š)i ‘dog’ (probably borrowed from HEC).
[] Attested in Africa only. In BLAŽEK, V. Lexicostatistical comparison of Omotic languages, cited are NS parallels: Nara wos, Taman: Merarir wiis ‘dog’. AADB 291.

Hyena

< AA *ʔaǯur– ‘kind of feline or viverra; hyena’:
  Cush. E.: LEC *ʔadur(r)– ‘viverra’: Oromo adurr–ee, Dasenech adur–e79; S. *ʔiǯVr– (met.) ‘viverra’: Alagwa žečûr–a, Burunge žiǯerar–e

78 Cf. also Darasa wälcô, warša with the comment in BLAŽEK, V. Beja historical phonology: Consonantism, #21: –r–/l– originating via dissimilation of the primary geminate.
79 Sidamo adurre ‘cat’, Dullay *ʔadur– (Dihina, Gollango aturre ‘wild cat’): the Sidamo and Dullay forms look like loanwords from Oromo in spite of the meaning difference.
Omot. N. * ḥar–: Kafa yeer–oo, ḥar–o ‘viverra’. 80
[] SED II No. 9; AADB 399.

Felines

42. Berb. *Hawar81 ‘lion’: Ghadames a–bur, Ghat a–her, Ahaggar, Ayr, E. Tawleemmet. a–har, Zenaga, Nefusa, Mzab war, Sened ar, etc.
< AA *ṣariw– ~ *ṣawvr– ‘kind of feline’:
    Chad. C. *Hiraw–: Musgu à–hiraw ‘leopard’, Munjuk a–hraw ‘panther’82
    Cush. E.: LEC: Somali ʔūrr–i ‘tom-cat’ (note the same meaning in MSA and Somali: a borrowing?)
[] SED II No. 41; AADB 2658.

< AA *baw/Har – ‘kind of large carnivorous animal’00000
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Sem. *ba(r)bar– (reduplication);66 Akk. barbar–u ‘wolf’; Arab. babr– (pl. babūr–) ‘espèce de chacal qui conduit le lion sur la piste de la proie’, ʔal–barbār– ‘lion’67

Cush. S. *baw/HVr–: Dahalo bó–r–a ‘any dangerous animal’.68


Small mammals

44. Berb. *a–g(r)arziz ‘hare’: Ghadames ta–ţerjīs, pl. ta–ţerzaz, Mzab, Wargla a–gergīz (–g– < *–z– assimilated to g–), Shawiya a–gʷarziz

< AA *gūrjī– ‘any small animal’.69

Chad. *garz– ‘kind of small animal’: C.: Gude tān–gōrzh–ăne ‘type of animal (like squirrel or weasel)’; E.: Dangla ġāržè ‘rat species’ (unless an Arabism), (!) ġiržīb–ő ‘varan’


[ ] AADB 3836; SED II No. 84.

felines, canines and hyenas to different roots; perhaps, Dahalo bó–r–a ‘any dangerous animal’ retains the original meaning.


67 Cf. also hubayr–at– ‘hyène’ (metathesis?)

68 Yaaku barié ‘jackal’ is considered a loanword from Masai.

69 For a semantic parallel, see Hbr. šärās ‘a mass of small animals or reptiles…’

80 Note a striking similarity between Sheko ġorţ–ub–e ‘lizard’ and E. Dangla girţīb–ő ‘varan’ (likely with a fossilized –b– suffix).
Reptiles and amphibia

[] AADB 2606. Cf. SED II No. 20.

< AA *kwar– ‘frog’:
Egyp. (NE) krr, Copt. *karar–aw ‘frog’.\(^{93}\)
[] SED II No. 137; AADB 270.

47. Berb. *mVLUL– ‘kind of snake’: Ayr, E. Tawlemmet molul, pl. molul–än ‘espèce de serpent’\(^{95}\)

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\(^{91}\) Cf. KOSSMANN, M. Essai sur la phonologie du proto-berbère, #681.
\(^{92}\) Dahalo ʔ in most cases continues AA *t, but there are a few rather convincing cases when it corresponds to Sem. *ʔ (< AA *č).
\(^{93}\) VYCICHL, W. Dictionnaire étymologique de la langue copte, pp. 86–87.
\(^{94}\) ʔ– in Syr. and –r– in Gz., Tgr. and Tna. are non-etymological.
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< AA *mul(l)aʕ– ‘snake; lizard’:
  (?) Egyp. (Gr.) mnḥ in kɪ-mnḥ (< *mlḥ?) ‘Schildkröte’
  Cush. E. *muluʕ– ‘lizard’: Afar mulluʕ–it, LEC: Somali muluʕ–a, Rendille mulʕá

Birds

  < AA *bal– ~ *balbil– ‘kind of heron’:
  Egyp. bnw< (MK) ‘phoenix’, (18 Dyn.) ‘heron’
  (?) Sem.: Akk. (SB, hapax) bulíl–ú ‘a species of crested bird’; Arab. ?ábbál– (pl.) ‘nom d’oiseaux fabuleux’ (SED II No. 3).

  < AA *bar– ‘kind of bird (partridge, quail, pigeon)’:
  Egyp. (old) b’ (if < *bVr) ‘kind of bird; jabiru’

96 BLAŽEK, V. Indo-European zoonyms in Afroasiatic perspective
97 Hardly a different bird in view of the full formal matching.
98 If < *blw; n of course can render *n as well, but there seems to be no matchable AA etymology for Egyp. egret-like bird with the root *bn.
Sem.: Hbr. *barbūr ‘a bird fattened to be eaten by King Solomon’; Tna. *barā-to, bari-to ‘turtledove’, Amh. bare-to ‘pigeon, dove’

[1] AADB 2228; SED II No. 61; CED #274.

50. Berb. *a–qaṭi/uṭ ‘bird (generic)’
< AA *gi/uṭ ‘kind of bird’:

[ ] AADB 2328. A scarcely represented outside Berber and semantically difficult case (‘dove’ versus ‘eagle’), but impeccable phonetically.

< AA *kwar– and kʷarkay– (partial reduplication) ‘kind of (young) large bird’:

(?) Egyp. (Pyr.) t’ (if < *kVr–) ‘junger Vogel (Schwalbe, Geier); junges Tier’
[ ] Cf. Sum. KUR.GI ‘goose’. AADB 377; cf. SED II No. 117; HSED 1505.

Claimed by some authors to be a series of borrowings: Aram. < Akk. < Sum.; Gz. < Arab. while neither is convincing in view of the AA parallels.
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   < AA *kaʔ(ʔ)r– ‘crow, raven’:
   Chad. kʷar– and kukar– (reduplication): C.: Podoko kskar–a, Cuvok kʷur–
   ūw ‘crow’; E.: E. Dangla kʰr–ɛ ‘espèce de corbeau noir’, Bidiya kuraag–a
   (met.; –g <*k by dissimilation?) ‘black crow’.
   Sem.: Eth. *kʰar– and *kʰaʔar– (reduplication) ‘crow, raven’: Gz. kʰaʔr
   Cush. C. *kur– and *kwakur– (reduplication): Bilîn kāʔgîr–a ‘der
   Rabe’100, Khantta qur–a, Qwara qur–a, Qemant hör–ay ‘raven’, Aungi kur–a
   ‘crow’; E.: LEC *kurr–: Oromo kurr–uu, Bayso kur–a, HEC *kūrʔ(–an)–:
   Hadiya koraan–ta, Alaba kur–a, Burji korʔan–ço, etc. ‘crow’.
   S.: Ari kuraak ‘crow’.
   [ ] Attested in Africa only. AADB 1668; SED II #134.

53. Berb. *a–wazz ‘ostrich; partridge’: Ghadames a–wɔz(z), pl. wɔzz–ān
   ‘autruche’, Igerwan wawužž, Izayan wawîž (partial reduplication), Messiwa, Ait
   Amran wawă ‘perdrix’
   < AA *ʔa–wazz– ‘kind of bird (partridge, goose, duck, cock’:
   Chad. E.: Mokilko ḥizū ‘chick, cock’
   Egyp. (Pyr) z.t ‘Ente, Ganz’, kʰzw.t ‘Erpel’ (i. e. ‘male of a duck’)
   Sem. *(ʔa–)wazz(z)– ‘goose’: (?) Akk. (OB lexical list) wazzu–a, some bird;
   Ugr. łu; PB ḳwāːzd; Syr. wazzā; Arab. wazz–, ʔawazz–; Gz. zyu (metathesis?)
   [ ] Cf. Sum. UZmuːen ‘duck’. AADB 2607; cf. SED II No. 22.

Fish

54. Berb.–Canarian *sVlm–ay, pl. *(i/ə–)salm–an ‘fish’.102 Ghat a–lmšay,
   Ahaggar a–sîlmy, pl. i–sîlmy–ān, Snus, Semlal, Izdeg, Qabyle a–slm,

100 kād is translated as ‘schreien, gakern’.
101 According to Bender’s phonological correspondences, k– in Kafa and Yems can
   continue AA *k–.
102 The only pan-Berber generic term. As for the Canarian one, it is rather an
   Ahaggarism (on this see MILITAREV, A. Libyo-Berbers – Tuaregs – Canarians:
   Linguistic Evidence, #1.2.4.4.).
Zenaga siżm–an (pl. of *silm–), Ghadames u–lism–a, etc.; Canarian (various islands) salema ‘Sparus Cantharus’, ‘pez de la clase de los torácicos’.*\(^{103}\) Egyp. (NK) nšmw.t ‘kind of fish’ (n < *l based on the unequivocal Berb. parallel).

[] This Berber-Egyptian term might have been taken for a common heritage from Afrasian were it not for the fact that the New Kingdom Egyp. nšmw.t evolved from the meaning ‘scales of fish’ attested as early as in the Middle Kingdom period (and, hence, having the “internal” Egyp. etymology) is identifiable as the source of the Berber term, the latter to be interpreted as *lVsm–ay or, rather, *lVšm–ay.*\(^{104}\)

**Insects**


< AA *pVryVe– ‘flea, grasshopper’:

\(^{103}\) In WÖLFEL, J. D. *Monumenta linguæ Canariae*, p. 563, compared to the Snus form (mentioning that it is common Berber), and to Latin salmo–onis. It is very likely that the Latin and Celtic terms for ‘salmon’ (note that this fish plays such an important role in Celtic mythology) were borrowed from the Proto-Lāḇyu-Berber plural form *(i/a–) salm–an.

\(^{104}\) With the relative adjective suffix *–ay, probably reflecting the original Egyptian meaning ‘scaly (fish)’. That only the Ghadames term’s order of root consonants matches the Egyptian one can be accounted for by the former (and, perhaps, similar unregistered forms in other East Berber languages) retaining the original – Egyptian – order, while in non-Eastern Berber, metathesis apparently took place due to the incompatibility tendency between the two lateral consonants in immediate contact: l and s which, according to the regular correspondence established by the author (Berber *s ~ Egyptian š < Afrasian voiceless lateral sibilant *š), must have still been pronounced as a lateral sibilant in early Berber. If this reasoning is correct, the “secondary” order of radicals in Canarian salema probably features it as a borrowing, conceivably from Tamāḥaq/Aḥaggar, rather than going back to the Proto-Berber-Canarian level. The Berber term was, in its term, borrowed in Hausa as lāmsà (likely from Ghat) and in the Central Chadic language of Bura as šalmwi (from some other Berber language) ‘a kind of fish’. In spite of the unspecified kind of fish in both Berber and Chadic, the coincidence of the tiradical terms with regular consonant correspondences in all the languages in question practically rules out a happenstance.

Sem. *pVry̞Vt- ~ *pVrVt- ‘flea’: Akk. perša?-u, puršu?-u, etc.; Hbr. paršš; Syr. purtāš–n-ā; Arab. burdyūt-.

Cush. E.: Dahalo pááreet–e ‘termite’ (*p̲arthec–?)

Omot. N.: Gimirra bir̲c– ‘ant’.

[] AADB 2595; SED II No. 185; STOLBOVA, O. Chadic lexical database.

Issue V. The rarest case of a four-consonant root at the Proto-Afrasian level.


< AA *baVr– ~ *barw– ‘kind of insect, fly’


< AA *garud– ~ *gurd–ay ‘kind of insect’:

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105 Cf. also a variant root: Arabic baryāš–(at)– ‘moucheron’

106 Note a variant root *kurđ– ‘kind of tick’: Iznassen kurdu, Senhaja a–kurdu, Rif kurdu, Qabyle a–kared, Shawiya a–kurd, Sened, Nefusa kurti and what seems another variant root – *i–kirdam ‘scorpion’ (#58).

107 Cf. KOSSMANN, M. Essai sur la phonologie du proto-berbère, #214.

¹⁰⁸ Commented on in SED II No. 83 as “the Arabic origin…is highly probable” but difference in the vocalic pattern speaks against it.

58. Berb. *i-kirdam ‘scorpion’; Qabyle i-yīrdem, Semail i-yīrdem, pl. i-yārdm–iun, Siwa t-i-gerdem–t, Ghadames ta-ṣārdem–t,¹⁰⁹ Audjila t-yārdim–t, Ahaggar é-yīrdem, pl. i-yīrādām, etc.¹¹⁰ Note a fossilized -m suffix.

< AA *k(ʷ)īrd– ‘tick; scorpion’;

Sem. *k(ʷ)ird– ‘tick; wasp’; Syr. Ḫārūd–ā ‘ricinus’; Arab. Ḫūrūd– ‘tique qui attaque les chevaux, les chameaux; ver qui se met dans les cuirs’; Tgr. Ḫūrūd, Tna. Ḫūrūd–āt ‘tick’

¹⁰⁸ Commented on in SED II No. 83 as “the Arabic origin…is highly probable” but difference in the vocalic pattern speaks against it.

¹⁰⁹ A rare but not the only case of AA and Berb. *k > Ghadames š.

¹¹⁰ Cf. KOSSMANN, M. Essai sur la phonologie du proto-berbère, #214.

¹¹¹ Cf. PRASSE, K.-G. A propos de l’origine de H touareg (tahaggart), #502; KOSSMANN, M. Essai sur la phonologie du proto-berbère, #20, 131. Cf. also Ghadames mi-mad ‘fourmilier (de monde, de parasites)’ in LANFRY, J. Ghadamès II. Glossaire, #0979, probably related but with d (< *t) instead of d.

¹¹² T symbol stands for any one of the dental stops (*t, *d, *θ).

< AA *mīnān–* ‘kind of insect, worm, etc.’:


[] AADB 2310; SED II No. 152


< AA *ziʒ(Ww)– ‘kind of insect (fly, bee; locust)’:

Chad. *ʔa–ziʒuw– ‘fly’; W. *ʔa–ziʒuw–: Diri āajjéé, ādzé, Dwot zii, Kulere aʒiʒuwaw; C. *(a)ziʒway–: Higi–Nkafa jūwi, Fali–Kiria jū, Mofu jāziʒwā, Gude jižiwā, Logone jū, etc.


[] AADB 2665; SED II No. 255. Probably descriptive.


< AA *ʒiḥab– ‘kind of insect (fly, bee)’:


Egyp. (MK) zə.t ‘kind of insect, parasite’

113 While the t–prefixation in zoonyms is not common, note a striking structural (but not semantic) affinity with the Berber, esp. Tuareg, forms.

114 According to DOZY, R. Supplément aux dictionnaires arabes. T. I, pp. 618–9, “un mot berbère” which is hardly so in view of the different meanings in Berb. and the cognates in other Sem.
Sem. *ḏubab* – ‘fly’; Hbr. ḏāḇāb ‘flies’; Syr. ḏabbāḥ-ā ‘musca’; Arab. ḏūbāb– ‘mouche; abeille’

[] AADB 365; SED II No. 73.

Ahaggar ḏ–zɒnbìb, Ayr, E. Tawllemmet. ḏ–zɒbennbɔr
< AA *ʿʒibar* – ‘bee, fly’;
Chad. W. *ma–ʒibar*–: Hausa mâʒibârī ‘sausage fly’
Sem. *dibar* – ‘bee’: Mhr., Hrs. ḏebbər, Soqotri ḏebheir.
[] AADB 364; cf. SED II No. 66 (p. 98). Likely derived from *ʿʒibab*–
‘kind of insect (fly, bee)’ with a fossilized –r suffix.

**Conclusion**

Out of the 63 analyzed Berber zoonyms with cognates in other Afrasian branches, 28 terms represent domesticated animals (dogs – 4, small cattle – 11, large cattle – 2, pigs – 1, odd-toed ungulates – 8, herd of ungulates, common to domestic and wild – 1, poultry – 1) and 34 designate wild animals (monkeys – 1, ungulates – 6, elephant – 1, canines – 4, hyenas – 1, felines – 2, hare – 1, reptiles and amphibia – 3, birds – 6, fishes – 1, insects – 9). Therefore, practically the whole spectrum of Berber fauna is represented, and the Afrasian origin of nearly all the Berber zoonyms analyzed is beyond doubt. As for the distribution of cognates in various AA families / branches, it is as follows: Chadic cognates – 40 (of which 3 are represented in one Chad. language only) plus 3 questionable cases; Egyptian – 14 plus 4 questionable plus 1 (#53) postulated Egyp. loan word in PBerb.; Semitic – 46 (out of which 2 are represented in Eth. Semitic only and 5 in Arabic only); Cushitic – 45 (of which 11 are represented in one Cush. language only); Omotic – 13 (of which 2 are represented in one Omot. language only) plus 1 questionable case.

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115 The Ahaggar word with –z– instead of the expected –h– is likely a loan from Ayr, E. Tawllemmet or any Berber language in which *z* > *z*.

116 In all instances of Semitic parallels attested in Arabic, only those Berber terms are quoted which, for this or that reason (chronological, semantic, etc.), cannot be Arabic loans or where borrowing from Arabic is unlikely.
Discussion

According to the author’s half a century of experience in comparative-historical and etymological research, the comparison in the widest possible coverage of each individual language lexicon in all related linguistic families and lexical reconstruction at the most chronologically deep level – or, alternatively, search for all possible sources of borrowing – can range from beneficial to indispensable for establishing even seemingly obvious phonetic correspondences / rules and suggestive etymologies within even the youngest and most compact language family such as Berber, not to mention complex and controversial cases. Lack of interest in going beyond the “narrow” comparison or inability to apply the correct methods of “broad” comparison often leads to what can be described by the oxymoron “scholarly folk etymology,” called by me “mythetymology”. These are false etymologies, often based upon a venerable scholarly tradition in a given field and sometimes honoured with great names.

One of the most striking examples from the field of Semitic etymology illustrating the last point relates to Akkadian isṣūr-u ‘bird’ (cognate with Ugaritic ʾṣr ʾṣṣūrû/ ‘bird, domestic fowl, poultry’) to Sem. *įṣpûr– proposed by some Semitists and uncritically repeated by others. Though the complete assimilation of –p– in the *–ṣp– cluster is not attested in Akkadian (to say nothing of Ugaritic), it seemed natural and appealing to connect it with Arabic ʿuṣfūr– and further on to a solid Sem. root *ṣVp(p)Vr– ‘(kind of small) bird’. Added to this is the notion in many heads, including those of certain linguists, that sound laws function with a lot of “spontaneous” exceptions and that regular sound correspondences are something sporadic and can rely on a single example.117 In fact, the decisive argument is a deeper etymology – in this case, on a common Afrasian level. Both debated terms, *įṣṣūr– and *ṣVp(p)Vr–,118 have matches in other Afrasian branches: (1) AA *ṣaṭir– ~ *ṣṭir– ‘(kind of) bird’: Sem. *įṣṣūr– ‘bird (generic)’; Cush. E.: Saho čar(r)āṭi ‘hornbill’, S.

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117 There are, in fact, what can be conventionally called exceptions to the sound laws, though rare and accounted for by our insufficient knowledge of subtle and understudied phenomena like contamination or variant roots which are to be turned up and puzzled out to the extent possible.

118 From which Arabic ʿuṣfūr–, with a prefixed root extention –ṭ– very likely derived – probably, due to contamination with *įṣṣūr– (see discussion in SED II No. 212 comments).
(Rift) *cirāʕ– ‘bird (generic)’: Iraqw cirį, etc.119 (2) AA *ṣifVr– ‘(kind of) bird’: Sem. *ṣip(p)Vr– ‘(kind of small) bird; bird (generic)’; Chad. *ṣifVr– ‘guinea fowl’: W.: Mburku čāpūr, C.: Bura civira, Margi čōvur, Wamdiu civūr, Mofu čāvur.120

Another similar example is Mandaic Aramaic ẓma, the main term for ‘blood’ (dma as ‘blood’ is also attested but is rarely used). Contrary to the opinion common in Semitic studies it is not a somewhat weird variant of dma < Sem. *dam- < AA *(ʔa-)dam– ‘blood’, but a separate relict root “in its own right”, probably cognate with a couple of Sem. terms (in Arab. and Gz.) but certainly originating from AA *γam(?)- ‘blood’ with reliable reflexes in Chadic and Omotic (see SED I No. 296).

Similar examples can be found in the field of Berber etymology and comparative phonetics.

Appendixes

Alphabetical index of reconstructed roots (according to the root consonants, prefixes do not count)

Ungulates

Berb. *a–bagug ‘young ram, lamb’ < AA *bag(gV)f– ‘(young) small cattle’
Berb. *ballVy ‘ram’ (pl.) < AA *bawil ~ *wabil– ~ *(ʔa–m–)bVl– ‘ram, goat’
Berb. *a–bakir ‘young goat or ram’ < AA *ba/ukir– ‘kind of (young) small bovid’
Berb. *a–brak ~ *i–bark–aw ‘bull, calf’ < AA *birak– ~ *kabir– ‘large bovid’

119 AADB 320. See the other S. Cush. and AA forms in SED II No. 43. The presence of the S. Cush. form, albeit with a metathesis, impermeable to Semitic and East Cushitic lexical borrowings makes this AA reconstruction of the triconsonantal root practically flawless.
120 AADB 363. The impeccable Semitic *ṣVp(p)Vr– has a weaker Afrasian etymology, based upon the Chadic parallels only, though a regular correspondence of all three consonants and the same order of radicals in both Semitic and Chadic make random coincidence unlikely.
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Berb. *a/i–damay ‘gazelle’ < AA *damaʔ/y– ‘kind of bovid, antelope’
Berb. *a–gur– ‘small cattle’ < AA *g’araʔ– ‘kind of bovid’
Berb. *ti–halay (< *–ʔalay, met.) ‘sheep’ < AA *ʔayl– ‘kind of lesser bovid’
Berb. *(a–)haray/w ‘small cattle’ < AA *haw/yr– ‘kind of small bovid’
Berb. *a/i–H ayr– ‘calf’ < AA *haw/yr– ‘kind of larger bovid’
Berb. *a–karw (~ *i–karr ~ *a–krar ‘young of small cattle’ < AA *kaw/yr– ‘young (small) bovid’
Berb. *a–saraw/y– ‘herd of animals’ < AA *saraw/y– ‘kind of bovid’
Berb. *a–w dad ‘Barbary sheep’ < AA *wad– ‘(wild) sheep’
Berb. *walli ‘small cattle’ < AA *waʔil– ‘kind of lesser bovid’
Berb. *(a–)zulay (met.) ‘buck of small cattle’ < AA *yuʔal– ‘kind of young smaller bovid’
Berb. *i–zamm– ‘kind of antelope’ < AA *ʒa(ʔ)Vm– ‘kind of bovid’
Berb. *i–ʒ(V)mVr ‘ram, lamb’ < AA *ʒVmVr– ‘kind of bovid’ Odd—toed ungulates
Berb. *a–bahul– ‘chameau’ (?) < AA *bay/kl– ‘mule’
Berb. *a–gil ~ *gVlgVl– (reduplication) ‘ass; camel’ < AA *(ʔa–)gal– ‘kind of equid or camel’
Berb. *(H)abal ‘(young) camel’ < AA *ʔabil– ‘camel’
Berb. *a–Hugg ‘colt, horse’ < AA *hu/ig–an/m– ‘kind of odd—toed ungulate’
Berb. *a–hulil ~ *(a–)hahul (partial reduplication) ‘young odd—toed ungulate’ < AA *(ʔ)hulil– ‘young odd—toed ungulate’
Berb. *i–kirkar ‘camels’ < AA *kawr– and *kirkar– (reduplication) ‘wild ass or camel’
Berb. *a–l(V)kum– ~ *a–l(V)lam– < AA *ʕalVk– ~ *lVkm– ~ *ʕalVm–
‘camel’

Berb. *sاردون <*s–اردون ‘mule’ < AA *ʕار(א)ד– ‘(wild) ass’

Largest herbivores
Berb. *yαι(W)lw ‘elephant’ < AA *ʕalw–

Monkeys
*دا(ن)gil ‘kind of monkey; dwarf’ < AA *דאנ(ו)ר ‘monkey; dwarf’

Canines
Berb. *bagg–ay ‘kind of wild canine’ < AA *bagg–ay ‘kind of wild canine or hyena’
Berb. *Husk–ay ‘greyhound’ < AA *ʔa/usk–ay– ‘kind of canine or hyena’
Berb. *א–ק(א)ן/ענ ‘(young) dog’ < AA *קVצim– or *KVצim– ‘dog’
Berb. *ʔVl– ‘wolf’ < AA *ʔaש/ʕ– ‘kind of canine; hyena’
Berb. *א–וור ‘jackal’ < AA *wahr– ‘kind of canine or hyena’
Berb. *wVššin (met. with reduplication) ‘jackal’ < AA *wanš– ‘kind of canine’
Berb. *א–ydiʔ ‘dog’ < AA *diʔ– ~ *ʔayd– (Berb.–Chad.) ‘dog’
Berb. *א–yκار (met.) ‘young dog’ < AA *κу(א)ד– ‘dog’

Hyena
Berb. *ע–יו–Vy ‘hyena’ < AA *ʔאזור– ‘kind of feline or viverra; hyena’

Felines
Berb. *א–בר–an ‘wild cat’ < AA *bawr– ‘kind of large carnivorous animal’
Berb. *Hawar– ‘lion’ < AA *ʕארו– ~ *ʕawvr– ‘kind of feline’
Small mammals
Berb. *a–g(ʷ)arziz ‘hare’ < AA *gVrVʒ– ‘any small animal’

Reptiles and amphibia
Berb. *a–karw and *karku/ir ‘toad, frog’ < AA *kʷar– ‘frog’
Berb. *mVlul– ‘kind of snake’ < AA *mul(l)aʃ– ‘snake; lizard’

Birds
Berb. *a–bilbil ‘heron, cattle egret’ < AA *balbil– ‘kind of heron’
Berb. *a–barr–: ‘partridge, quail’ < AA *bar– ‘kind of bird (partridge, quail, pigeon)’
Berb. *a–gaṭi/uṭ ‘bird (generic)’ < AA *gi/uṭaʃ– ‘kind of bird’
Berb. *a–kVr–t ‘young of a bird’ < AA *kʷar– and kʷark–ay ‘kind of (young) large bird’
Berb. *a–kru–t– ‘raven’ < AA *kʷa(?)/r– ‘crow, raven’
Berb. *a–wazz ‘ostrich; partridge’ < AA *ʔa–waʃʒ–

Fish
Berb. *sVlm–ay ‘fish’

Insects
Berb. *buryVs– ‘kind of insect’ < AA *pVryVč– ‘flea, grasshopper’
Berb. *a–bVrrīw ‘locust, cricket’ < AA *baʔNɾ– ~ *barw– ‘kind of insect, fly’
Berb. *a–gurd–ay ‘kind of tick’ < AA *garud– ~ *gurd–ay ‘kind of insect’
Berb. *i–kirdam ‘scorpion’ < AA *k(ʷ)ird– ‘tick; scorpion’
Berb. *ta–*madiʔ–t ‘termite’ < AA *maTiʔ– ‘termite, ant’
Berb. *ta–*minaw– ‘kind of fly; louse's eggs’ < AA *minaw/n– ‘kind of insect, worm, etc.’
Berb. *izi ~ *zizw– ‘fly, bee’ < AA *ʒiz(IVw)– ‘kind of insect (fly, bee; locust)’
Berb. *a/i–zibab– ‘(horse-)fly’ < AA *ǯibab– ‘kind of insect (fly, bee)’
Berb. *a–zVnbVr (partial. reduplication) ‘coleoptera species’ < AA *ǯibar– ‘bee, fly’

Abbreviations
AA = Afrasian, Afroasiatic, Afro-Asiatic; Akk. = Akkadian; Amh. = Amharic; Arab. = Arabic; Aram. = Aramaic; Berb. = Berber; Chad. = Chadic; C. = Central; Copt. = Coptic; Cush. = Cushitic; E. = East; Egyp. = Egyptian; ESA = Epigraphic South Arabian; Eth. = Ethiopian; Gur. = Gurage; Gz. = Ge'ez; Har. = Harari; Hbr. = Hebrew; Hbt. = Hobyot; HEC = Highland East Cushitic; Hrs. = Harsusi; Jib. = Jibbali; Jud. = Judaic Aramaic; LEC = Lowland East Cushitic; Mand. = Mandaic; MB = Middle Babylonian; Mhr. = Mehri; Min. = Minaean; MK = Middle Kingdom; MSA = Modern South Arabian; N. = North; NE = New Kingdom; OB = Old Babylonian; Off. = Official Aramaic; OK = Old Kingdom; P. = Proto–; PAA = Proto-Afrasian; Phoen. = Phoenician; Qat. = Qatabanian; S. = South; Sub. = Sabaic; Sem. = Semitic; Soq. = Soqotri; Sum. = Sumerian; Syr. = Syriac; Tgr. = Tigre; Tna. = Tigrinya (Tigray); Ugr. = Ugaritic

Transcription and transliteration
\( \breve{p} \) bilabial emphatic voiced stop; \( \breve{b} \) bilabial emphatic voiced stop; \( \breve{h} \) bilabial voiced fricative; \( \breve{t} \) dental emphatic voiceless stop; \( \breve{d} \) dental emphatic voiced stop; \( \breve{t} \) voiceless interdental fricative (in Egyp., a conventional symbol conveying \( \breve{c} < *k \)); \( \breve{d} \) voiced interdental fricative (in Egyp., a conventional symbol conveying \( \breve{j} \)); \( \breve{c} \) alveolar voiceless affricate [ts]; \( \breve{z} \) alveolar voiced affricate [dz]; \( \breve{c} \) palato–alveolar voiceless affricate [tš]; \( \breve{z} \) palato–alveolar voiced affricate [dž]; \( \breve{s} \) hissing emphatic voiceless fricative; \( \breve{c} \) emphatic voiceless affricate; \( \breve{z} \) emphatic voiced fricative; \( \breve{c} \) palato–alveolar emphatic affricate; \( \breve{s} \) lateral voiceless fricative; \( \breve{c} \) lateral voiceless affricate; \( \breve{s} \) lateral voiceless emphatic fricative; \( \breve{c} \) lateral voiceless emphatic affricate; \( \breve{z} \) lateral voiceless sibilant; \( \breve{g} \) voiced velar fricative (in Berb.), \( k \) or \( q \) emphatic velar stop; \( y \) uvular voiced fricative (Arabic "ghain"); \( \breve{h} \) uvular voiceless fricative; \( \breve{h} \) pharyngeal
voiceless fricative; ꚱ pharyngeal stop (“ayin”), ꚱ laryngeal voiceless fricative; ꚴ glottal stop (“aleph”, “hamza”), ꚮ palatal resonant; ꚱ and ꚯ conventional transcription symbols accepted in Egyptology.

Conventions for reconstructed proto-forms.

V renders a non-specified vowel, e.g. *bVr– should be read “either *bar–, or *bir–, or *bur–.”

H renders a non-specified laryngeal or pharyngeal.

S renders a non-specified sibilant.

/ when separating two symbols means “or”, e.g. *ʔi/abar– should be read “either *ʔibar– or *ʔabar–.”

( ) a symbol in round brackets means “with or without this symbol”, e.g. *ba(w)r– should be read “*bawr– or *bar–.”

~ means “and” pointing to two or more co-existing proto-forms.

Abbreviations of sources


REFERENCES


AMAN IMAN. One thousand Berber and Hassaniya words and their variants concerning traditional water resources, irrigation systems, crops and cultivation. Simon Fitzwilliam–Hall, 2012.
BLAŽEK, Václav. Simiae. Ms.
Reconstructing a Cultural Lexicon for pre History: Berber Zoonyms of Afrasian…


NICOLAS, Francis. La langue berbère de Mauritanie. Dakar: Institut Français d’Afrique Noire, 1953.


Reconstructing a Cultural Lexicon for pre History: Berber Zoonyms of Afrasian…


