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Proto-Afrasian names of non-ungulate animals in light of the Proto-Afrasian homeland issue

In this paper, we present the second section³ of a relatively comprehensive thesaurus of Proto-Afrasian zoonyms, compiled and reconstructed by the authors. The list contains more than sixty terms, including monkeys, canines and hyenas, felines, rodents and other mammals, birds, reptiles, amphibia and fishes complementing and completing a wholesome (at the current level of our knowledge) picture of all relevant species of fauna in the period preceding the split of Proto-Afrasian (ca. 11th millennium BCE, according to glottochronology) within the area presumably inhabited by speakers of Proto-Afrasian. Results of the reconstruction may be ambiguously interpreted in favor of either one of the two different points of view on the localization of the Proto-Afrasian homeland, namely, the Levant vs. East Africa.

Keywords: Proto-Afrasian homeland; Afrasian (Afro-Asiatic) languages; etymology of zoonyms; reconstruction of cultural lexicon.

Introduction

In this paper, we present comparative evidence for a large number of Proto-Afro-Asiatic (PAA) “non-ungulate” zoonyms, including monkeys (4 terms), predators (22 terms), other mammals (a selection of 8 terms), birds (selection of 11 terms), reptiles (selection of 9 terms), water reptiles and amphibia (selection of 4 terms), and fishes (selection of 5 terms). Within the “predator” subset, we differentiate between 8 reconstructed terms for canines, including ‘dog’ (**kawit-*, **k^wihan-*, **KV₃/žim-*), ‘k. of wild canine’ (**?away-*, **?aw/ys-*, **bawih-*, **kur(-ay-)*, **wanš-*), 4 undifferentiated terms ‘k. of canine or hyena’ (**?a/usk-ay-*, **ba?V_š-*, **gVd-*, **wahr-*), 9 terms for felines including ‘lion’ (**labi?*-), ‘leopard or lion’ (**ba?y-*), ‘k. of (wild) feline’ (**?ariw-*, **ba?is-*, **da(?)y)m-*, **giwar-*, **layč-*, **mary-*, **sawr-*), and one undifferentiated term ‘k. of feline, hyena or viverra’ (**?ažur-*).

In the opinion of one of the paper’s authors (S. Nikolaev), this particular array of predators in the context of terms for monkeys, ungulates and large herbivores should stimulate a search for the PAA homeland in the Eastern part of the Sahel. Although some of these zoonyms are universal and thus “neutral” in regards to the debatable issue of the Afrasian *Urheimat*, others at least make it possible to add an important observation (which, however, could hardly shed any more light on the problem, since it can be interpreted both ways): while

¹ Lexical material, reconstruction of zoonyms and presentation of the Levant *Urheimat* hypothesis for Proto-Afrasiats, including their identification with Natufians. Militarev’s research is supported by The Russian Science Foundation (Project № 20-18-00159); the financing organization is The Institute of Linguistics, Russian Academy of Sciences.

² Evaluation of PAA zoonyms, their paleozoological interpretation and argumentation in favor of the African (most likely East Sudanic) Urheimat of Proto-Afrasian, as well as commentary on the semantic reconstruction of zoonyms.

³ The first section, “Proto-Afrasian names of ungulates in light of the Proto-Afrasian homeland issue”, was published in 2020 (*Journal of Language Relationship* 18/3–4: 199–226). The list in the second section continues the numeration begun in the first one (1. Bovids and pigs; 2. Camel and equids; 3. Largest herbivores).

there are terms in various Semitic (not only Ethiopian Semitic) languages that denote African animals such as the ones represented in the current paper (namely, monkeys and crocodiles), not a single one of those has a common Afrasian or even common Semitic etymology. This evidently implies a late origin of the corresponding Semitic zoonyms and, hence, late acquaintance of the already linguistically separated Semitic-speaking groups with the corresponding African animals.

A special commentary is needed for the issue of semantic reconstruction of zoonyms. It is quite rare that the Proto-Afrasian meaning may be reconstructed unequivocally on the basis of perfectly matching semantics, as in the following cases:

5.9. **kʷihān-* ‘dog [*Canis familiaris*]’.

Chad. **kʷiHan-* ‘dog’: W. **kʷiHan-*: Fyer *kʷéen* || E. **kany-* ~ **kayan-*: W.Dangla *kāny-à* | E.Dangla *kāny-à* | Migama *kāny-à* | Mabire *kany* | Jegu *kány* | Birgit *káyàñ*.

Cush. E. **kʷihān-*: Yaaku *kwehen* ‘dog’.

Omot. **kʷiHan-* ‘dog’: N. **ku/iHan-*: Wolaita, Gamu, Dawro, Zala, Malo, Dache, Koyra, Zayse, Gimira (Bench) *kyan* | Yemsa, Bworo *kan-a* | Kafa, Mocha *kun-ano* | Dizi (Sheko) *kean-u* | Mao (Hozo) *kan-a*, etc. || S. **kan-*: Dime *kēn-ε*, Galila *kan-i*.

6.7. **labi?-* ‘lion [*Panthera leo*]’

Sem. **labi?-*: Akk. *labb-u* (*lab?-u*, *lāb-u*) || Ugr. *lb?-u* ‘lion’ [*Panthera leo*] || Hbr. *lābī(?)* ‘lioness’ || Sab. *lb?* ‘lion, lioness’ || Arab. *luba?-at-, labu?-at-, libw-at-*, etc. ‘lionne’.

Egyp. (OK) *rw ȝbw*, inscription under the image of a lion | Copt.: Bohairic, Sahidic *laboy* ‘lion; bear’ [*P. leo*; *Ursus arctos*].

Chad. **la/ib-*: W. **lab-*: Tangale *lab-ata* (f.) ‘lioness’ [*P. leo*] || C. *(*a*-)*lib-ar-* ‘lion’ [*P. leo*]: Hwona *lifār-i* | Margi *ha-livār-i* | Chibak *?a-lvār-i* | Kilba *lēvār-i* | Kapsiki *nīvēr-i* (dissim.) | Higi-Nkafa *livēr-i* | Gude *līvyār-á*.

Cush. E. **lu/ib-* ‘lion’ [*P. leo*]: SA **lub-ak-*: Saho, Afar *lubaak* | LEC **lib-ah-*: Somali *libah* | Jiddu *libáah-u*.

In the vast majority of cases, semantic reconstruction is difficult for four main reasons:

1) intermediate proto-languages, except for the relatively young Proto-Berber, are characterized by a considerable time depth (Proto-Chadic, Proto-Cushitic, Proto-Omotic, somewhat younger Proto-Semitic), which makes diverse semantic shifts inevitable;

2) meanings of zoonyms in dictionaries of most Afrasian languages are often quoted inaccurately — in particular, specific species of animals are given as approximate or generic terms: “antelope”, “deer”, “duiker”, “wild cat”, etc., although in reality these zoonyms probably denote more concrete species;

3) according to modern scientific data (though somewhat debatable), in the Proto-Afrasian period there were no domestic animals (except for the dog [*Canis familiaris*]); names of wild animals were transferred to domestic ones (and *vice versa*) in the history of individual Afrasian families and languages; if so, “domestic” zoonyms do not contribute to an accurate reconstruction of the Proto-Afrasian semantics of the animal names;

4) zoonyms in various Afrasian languages can denote entire zoological groups (“small ungulates”, “largest animals”, etc.) or sex and age characteristics of certain animals (‘bull’, ‘ram’, ‘kid’, ‘lamb’, etc.); to reconstruct terms with such semantics for Proto-Afrasian is particularly difficult because of their lack of semantic stability.

Below we list several examples in which specifically “wild” semantic reflexes are indicated in semi-bold type. The remaining reflexes either refer to domestic animals and age / sex

groups, or to unspecified wild species. With such semantically chaotic material, semantic reconstruction for Proto-Afrasian is possible only within the framework of generalizing to large zoological groups – “lesser bovids”, “larger bovids”, “equids”, “canines”, “felines”, etc., even though in Proto-Afrasian all or most of these terms may have had more specific meanings.

1.2. *?ayl- ‘k. of lesser bovid’

Sem. *?ayl-: (?) Akk. *al-u* (*el-u*) ‘a fine breed of sheep’ (reading arguable) || Ugr. ?*al*, ?*il* ‘ram of superior quality’ | Hbr. ?*ayil* ‘ram’ | ESA: Sab. ?*yl* ‘mountain goat, ibex’ [C. *ibex*], Min. ?*yl* ‘bélier, bouquetin’ [C. *ibex*] | Arab. ?*iyyal-*, ?*uyyāl-* ‘bouquetin, bouc de montagnes’ [C. *ibex*].

Berb. **ti-halay* (< *?ayal, met.?) ‘sheep’: Nefusa *t-ili* | Zenaga *t-iži* | Ahaggar té-helé, Ghat či-hali, Ayr *t-ele*, E. Wlm. *te-hole*, etc.

Cush. *?ayl-: N. *?all-i: Beja *all-i*, pl. *ill-i* ‘long-haired sheep’ || E.: SA *?ill-: Saho *ill-e*, Afar *ill-i* ‘small cattle’ | LEC *?el- (< *?il- or *?ayl-): Somali *eel-o* ‘tipo de gazella (antilope giraffa)’ [Li-tocranius walleri], Arbore ?*ell-ém*, Elmolo ?*él-em* ‘ram’ || S. *?ayl-: Gorowa *elete-mo* ‘bushbuck’ [Tragelaphus sylvaticus] | Ma'a *i?al-é* ‘ram’, *i?al-ú* (met. < *?ayl-?) ‘sheep’ | Dahalo ?*èèl-e* ‘harte-beest’ [Alcelaphus buselaphus].

1.13a. *guday- ‘k. of larger bovid’

Sem. **gaday-* ‘kid’: Ugr. *gdy* ‘kid’ | Phoen. *gd?* ‘goat’, Hbr. *gədī* ‘kid (of goat or sheep)’ | Aram.: Anc. *għi* ‘goat’, Syr. *gady-ā*, Mand. *gadi-a* | Arab. ?*adāy-* ‘kid’, ?*adāy-at-* ‘gazelle; petit de gazelle’ [Gazella gazella].

(?) Berb. N. *-gVnd-uz ‘bull, calf’: Rif *a-yenduz* ‘taureau’, Snus *a-yenduz*, Shenwa, Qabyle *a-genduz*, Sened *a-gendus*, etc. ‘calf’.

Chad. **ga/uday-*: W. **ga/ud-* ‘k. of bovid’: Hausa *gàd-áa* ‘antelope, duiker sp.’, Kariya *gud-am*, Miya *gud-an-zāku*, Pa'a *gud-an-cəka* ‘Western kob’ [Kobus kob], Ngizim *gád-ùwà* ‘duiker’ || C. **gVday-*: Zime-Batna *góðay* ‘buck’.

Cush. **gad-* and **gund-* ‘k. of larger bovid’: E. **gad-am-*: LEC **gad-am-*: Oromo *gad-am-sa* ‘greater kudu’ [Tragelaphus strepsiceros], Dirayta *gad-an-sa*, *gad-am-sa* ‘antelope’ | HEC **gud-*: Sidamo *god-a* ‘deer, gazelle’ || S. **gwand-*: Iraqw *gwand-a*, Alagwa *gwand-o* ‘ram’, Burunge *gond-i* ‘old ram’.

Omot. N. **gayd-* (met.): Zaisse *gaidd-é* ‘cattle’, *gaid-é-endo* ‘buffalo’ [Syncerus caffer].

1.14a. *gawr- ‘k. of bovid’

Sem. *(*a-*)*gurr-*: Akk. (MA) *gurr-atu*, *agurr-atu* ‘ewe’.

Egyp. (MK) *dr* ‘calf’ (if < **gVr*).

Berb. *-*gur-* ‘small cattle’: Ghadames *a-žur* ‘bouc’ (Naït-Zerrad 2002: 859), Zenaga *a-grərh* ‘bélier’ (Nicolas)

Chad. (a) *(*a-*)*garw/y-* ‘kind of bovid (*Redunca*, *Oryx*, *Ourebia*, etc.); animal, game’: W. *(*a-*)*gary-*: Hausa *āgārē* ‘a big, male red-fronted gazelle’ [Eudorcas rufifrons], Tsagu *gārē* ‘reedbuck’ [Redunca redunca], Mburku *gāri* ‘oryx’ [Oryx leucoryx ?], Ngizim *a-gare* ‘gazelle’ || C. (*a-n-*)*gary-*: Logone *gari-a*, Makeri *ingarii* ‘antelope’, Buduma *ŋgari* ‘gazelle’ || E. **gVrw-* and **gVwVr-* (met.): Tumak *gəru*, Kwang *gowor-to* ‘antelope’, Ndam *gərù* ‘ourebi’ [Ourebia ourebi]; (b) **garaw-* ‘herd of cattle’: W. **gar(V)w-*: Hausa *gár-kei* ‘a herd, flock’, Bolewa *gaarùw-à* ‘pack ox’, Karekare *gaarùw-à* ‘bull’, Tangale *káarw-a* ‘cattle’ || C. **garaw/y-*: Bana *gàrəw-à* ‘troupeau de bœufs’, Gude *górá-nə* ‘herd of cattle’, *mà-górá* ‘shepherd, wachtsman’, Musgu *gari*, *gári* ‘Stier, Laststier’, Mandara *gári* ‘bull’, Hursa *goragor-a* (redupl.), Užam *gwar-a*, Matakom *ŋ-gwur* ‘ram’ || E. **garaw-*: Bidiya *gaaruw-o* ‘animal’, Migama *gáráw* ‘bête, bétail’; (c) C. **gʷar-* and **gʷargʷar-* (redupl.) ‘ram’: Ouldem *gʷàr-à*, Mbuko *gʷàrgʷár-á*, Merey *gʷaràgʷàr-a*, Muyang *gʷòrògʷòr-à*,

Mada *gurgwar-a* || E. **gagar-* (redupl.) ‘small cattle’: Sok *gaáger-o* ‘Schaf’, Mawa *gagar* ‘mouton’, Mubi *wegr-i* (met.) ‘chèvre’.

Cush. **garaw-* and **gwira?-* (met.) ‘k. of larger bovid [*Taurotragus*, *Alcelaphus*, etc.]’: N. **garuw-*: Beja *garuw-a* ‘male antelope; eland’ [*Taurotragus oryx*] || C. **gar-* ‘calf’: Bilin, Qwara, Qemant *gär*, Aungi *gara* || E.: HEC **gur(r)-*: Sidamo *gur-um* ?iččo ‘gazelle’, *garr-ančo* ‘Agazen antelope’ [*T. buxtoni*] || S. **gvara?-*: Iraqw *gvara?-ai* ‘Hartebeest’ [*Alcelaphus caama*], Burunge *gera?-i* ‘Grant’s gazelle’ [*Nanger granti*].

Omot. N. **gaHar-* ‘antelope dekula [*Tragelaphus decula*]’: Wolayta, Dawro *gaar-aa*.

1.18. **lawi?-* ‘k. of large (?) bovid’

Sem. **lawi?-* and **lawli?-* (redupl.) ‘k. of. large bovid [*Bos*, *Syncerus*, *Connochaetes*, etc.]’: Akk. (OB on) *litt-u* (*lit-u*) ‘cow’, *lalû* (*lali?-u*, *lala?-u*) ‘kid’, *lulī-mu* ‘red deer, stag’ [*Cervus elaphus*] || Ebl. *lī-a-nūm*, *lī-a-nu-um* ‘cow’ | Ugr. *ll?-u* ‘lamb, kid’ | Hbr. *lē?-ā* ‘wild cow’ (only as a pers. name) | Arab. *lā?la* ‘taureau sauvage, buffle’ [*Syncerus caffer*], *lu?lu?-* ‘antilope’ | Tgr. *lul-it*, pl. *läwäll-it* ‘(cow) with long, crooked horns’, Amh. *lil(lə)wil* ‘gnu’ [*Connochaetes taurinus*] || Mhr. *ləhay-tən* ‘cows’, Hbt. *leé*, pl. *lháyta*, Jib. *le?*, pl. *lhó-ti*, Soq. *?e-lh-eh* ‘cow’, *lúl-oh* ‘brébis’.

Egyp. (Pyr.) *iw?* ‘bull’ (if < **IVwV?*-).

Berb. **w/yalaH-* (met.): Izayan *ta-wala* ‘troupeau de bœufs, sangliers’, Ahaggar *élah-ei* ‘mouton à laine’.

Chad. **laway-* ‘k. of larger bovid (*Tragelaphus*, etc.): W.: Dera *la-à* ‘cow’ || C.: Gude *la* ‘cow’ (Jungraithmayr, Ibriszimow), Kapsiki, Higi-Nkafa *le*, Higi-Baza *lɔl-ε* (redupl.) ‘gazelle’, Higi-Ghye *le*, Bachama *līyey* ‘duiker’ (St. 2005 #57), Masa *lūway* ‘troupeau, le betail’ (CED #549).

Cush. **lawi?-* ‘cattle’: C. **luway-:* Bilin *luwī*, Khamir *luwā*, Awngi *luwā* || E. **la?-* and **la?la?-* (redupl.): SA **la(?)-*: Saho, Afar *lā* ‘cow, cattle’ | LEC **lo?(lo?)-* ‘cows (coll.)’: Somali *lo?* ‘cows (coll.)’, Rendille (pl.) *loóly-o*, Oromo *loo-ni* ‘cows (coll.)’, *lal-eesa* ‘she-goat’, Konso *low-aa* ‘cows’, Dasenech *lal-o*, pl. *lal-i* ‘cow’, etc. | HEC **lal-*: Sidamo *lal-o* ‘cows, cattle’, *laat-to* (f.) ‘young sheep, lamb’ || Dullay **lo?-*, pl. **le?-* ‘cow’: Harso, Dipina, Gollango *lō?-o*, Tsamay *lō?-ō-*, pl. *lē?-ē*, etc. || S. **li?-*: Iraqw *le?-i* | Gorowa *lee?-i* ‘goat’ | Qwadza *le?-amuko* ‘bull’.

5.1. **?away-* or **yawa?-* (met.) ‘k. of canine’

Sem. **?away-*: Hbr. **?i* (pl. *?iyyīm*) ‘jackal’ [*C. aureus*] | Syr. *bənāt ?away* ‘thoes, canes aurei’ [*Canis aureus*] || Arab. *?ibnu-l-?āwan* ‘animal regardé comme un mélange né d’un chien et d’un renard’ || Tgr. *?aw* ‘eatable wild animals’ | Amh. *yäyi* ‘hyena’ [*Hyaenidae sp.*], *awu* ‘hyena’s cry; hyena’ [*Hyaenidae sp.*] | Gur.: Chaha, Gyeto, Ennemor, Muher *awi* ‘wild animal, beast’.

Egyp. (MK) *i?w* ‘dog’ (met. < **Vyw*?).

Chad. W. *(?)*iy-*: Warji *iyù-nà* | Kariya *ii* | Miya *i* ‘dog’.

Cush. E. **yawa?-:* LEC **yaw/ya?-:* Somali *ey* ‘dog’, *yéèy* ‘wild dog’ [*Lycaon pictus*] | Boni *óy?* ‘dog’, *yeye?* ‘jackal’ [*C. aureus*] | Rendille *yááy* ‘wild dog’ [*L. pictus*] | Oromo *yeey-ii* ‘wolf; wild dog’ [*L. pictus*] | Konso *yoy-ta* ‘hunting dog’ [*L. pictus*] | HEC **yayy-* ‘hunting dog’ [*L. pictus*]: Sidamo *iyäy* | Hadiya *yoyy-akko* | Burji *yeyy-ée*.

6.9. **mary-* or **mayr-* ‘k. of feline’

Sem. **namir-* (< **na-mir-* or **na-mayr-* with the fossilized prefix) ‘leopard’ [*Panthera pardus*]: Akk. *nimir-* (*nammar-*) ‘panther’ || Hbr. *nāmēr* ‘leopard, panther’ || Aram.: Anc., Off. *nmr* | Bibl. *nəmar* ‘panther’ | Mand. *namar* (*nimir*, *namr*) ‘leopard’ | Sab. *nmr* ‘leopard, panther’ | Hdr. *nmr* ‘panthère’ || Arab. *nimir-* ‘panthère’, *namir-* ‘léopard, panthère’ || Gz. *namr* | Tna., Tgr. *näbri* ‘leopard’ | Amh. *nämr*, *näbər* ‘lynx’ [*Caracal caracal*] | Sel. *näwər* | Wol. *näwr*.

Egyp. (OK) *m̥y* ‘lion’ [*Panthera leo*] (if < **mVry*).

Chad. *mary- and *mumur-/*murum- (redupl.): W. *mumur-: Dera *mūmur-u* ‘cheetah’ [*Acinonyx jubatus*] | Polchi *mur* ‘jackal’ [*Canis aureus*] | Bokkos *mùrûm* | Sha, Daffo-Butura *mùrûm* ‘hyena’ [*Crocuta crocuta*] || C. *mary-: Mafa *mariy-žéle* ‘lion’ [*Panthera leo*] | Lame *mér* ‘serval’ [*Caracal serval*], méri-án ‘wild cat’ [*Felis sp.*] | Peve méri-án ‘Id.’ | Zime-Dari *mîr* ‘genette’ [*Genetta sp.*].

Cush. (a) *mary-, *mawir- and *marir- (redupl.): E.: LEC *mawr-: Oromo *mōr-ē* ‘**civet(-cat)**’ [*Civettictis civetta*] | Dasenech *mor* ‘lion, leopard’ || S. *mir- and *marir- (redupl.): Gorowa *marir-ika* ‘**leopard**’ [*P. pardus*] | Alagwa *mariy-amo* ‘wild cat’ | Asa *mer-ok* ‘**lion**’ [*P. leo*]; (b) N. *mir-al-: Beja *miral-ai* ‘**cheetah**’ [*Acinonyx jubatus*] | E.: Dullay *mir-l-: Tsamai *mirle* ‘**leopard**’ [*P. pardus*].

Data

Below we present the entire material in numerical order.

4. Monkeys ⁴

4.1. *dang(^w)Vl/r- ‘monkey; dwarf’

(?) Sem. *duggal-: Arab. *dužjal-* ‘vil, bas, de basses classes (hommes)’.

Egyp. (OK) *dng*, *dʒg* (< **dłg*), *dŋ* (< **dłng*, met. of **dVngVl-?*) ‘dwarf’.

Berb. *da(n)gil: Ghat *a-dažel* ‘singe’, *ta-dažel-t* ‘guenon (*Cercopithecus*)’ [*Cercopithecus sp.*] | Sokna *dágel* ‘monkey’ | Nefusa *a-dənžal* ‘dwarf’.

Chad. *da(n)g(^w)-ir/l-: W.: Hausa *gand-i* (met. < **dang-*) ‘pigmy’ || C. *da(n)g^wil/r-: W. Margi *dagil* | Chibak *dakil* (devoicing of *-g?) ‘monkey’ | Gude *dángwár-á* ‘adult male of an *erd* monkey’ | Dghwede *gándáw-à* (met. < **dangw-*) | Buduma *dágel* ‘monkey’ || E. *di(n)g^w-Vr-: Ndam *góğom dágré* | Dangla *gùdiny-à* (met. < **dingw-*) ‘monkey’ (Jungraithmayr, Ibriszimow 1994).

Cush. E. *da(n)gir- ‘monkey’: ⁵ LEC *da(n)gir-: Somali (var. dialects) *dajer*, *danžar* | Boni *dašer* (< **dažer* < **dagir*) | HEC *dagir-: Hadiya *dagier-aa* | Kambatta *dagier-aa*.

▲ Cf. Kordofan Nubian: Dair *tigil*, Koldegi *tingel*, Midob *tanni* ‘monkey’ (Blažek Ms. apud Meinhof) and Saharan: Tubu *dəgəl* ‘ape’ (Lukas 1953: 183).

► AADB 38, 392.

4.2. *guray- ‘k. of monkey’

Chad. W. *garay-: Polchi *gari* | Dwot *gàri* ‘monkey’.

Cush. E. *gVray-: Yaaku *kɔrɔi*⁶ ‘monkey *Colobus*’ [*Colobus sp.*].

Omot. *gayur- (met.): N. *goyr-: Malo *gor-o* | Basketo *goyr-a* | Chara *gor-ʔa* | Gimira *gorr*, *gwor* ‘monkey’ | Dizi-Sheko *gyer-u* ‘baboon’ [*Papio sp.*] || S. *gayur-: Ari *goyr-a* | Hamar *guro* | Dime *guur-u* ‘baboon’ [*Papio sp.*].

► AADB 4251.

⁴ Some forms are quoted after Blažek Ms., though our understanding of consonantal correspondences and, hence, distribution of the forms among different entries is, in most cases, distinct from this very useful collection of data.

⁵ Cf. what looks like a variant root – **dink-* ‘dwarf’: LEC: Oromo *dink-i* (borrowed in Mod. Eth **dink- id.*) | HEC: Kambatta *dənk-a*, Tembaro *dink-a* (borrowed in Omot. N.: Kafa *dikk-ō* id.). Various authors reconstruct for this root E. Cush. *ž- instead of *d- (Dolgopolsky 1973: 107–8; Blažek Ms.) or *z- (Sasse 1976: 140), probably because of C. Cush. *ž- (see 4.4). The only form probably tipping the scale towards *ž- instead of *d- is Jiddu *yāšire* ‘monkey’: that AA *ž- > Jiddu *y* is a fact, but whether Jid. -š- can continue AA *-g- is not clear: if it can, the E. Cush. root should be compared to 4.4.

⁶ Yaaku *k* can continue both PAA **k* and **g*.

4.3. **ka(?a)yr-* ‘k. of monkey’

Chad. W. **kayr-*: Sura *kaar* ‘red monkey’ [*Piliocolobus sp.*] | Angas *ker* ‘monkey’, *nker* ‘baboon’ [*Papio sp.*] (Kraft 1981) | Wangday *kär-é* | Fyer *kiür* | Bokkos *kyer-ãŋ* ‘red monkey’ [*Piliocolobus sp.*]⁷

Cush. E.: LEC *ka(?a)r-*: Arbore *kaarr-an* ‘vervet monkey’ [*Chlorocebus pygerythrus*].

Omot. **ka(?a)r-* ‘monkey’: N.: Basketo *kar-a* | Male *kaar-a* ‘vervet’ [*Ch. pygerythrus*] | Gemu *kaar-é* | Gofa, Dorze *kar-e* | Oyda, Zasse *kaar-e* ‘baboon’ [*Papio sp.*] | Kafa (argo) *ker-iyo* ‘monkey (*Cercopithecus*)’ [*Cercopithecus sp.*] || S. *ka(?a)r-*: Ari-Bako *kar-ā* | Hamar *káár* | Dime *kar-e* ‘monkey’.

► AADB 2208. Cf. HSED 1569.

4.4. **žag(w)-il/r-* ‘k. of monkey’

Chad. **ži(n)gw-al-*: C. **ži(n)gway(-l)-*: Hildi *dziláju* (**žilang*, met. < **žingal-*) | Mbuko *zəgày* | Zime-Batna *žéŋgū* (or *žéŋgu*) ‘k. of monkey’ || E. **zugul-*: Birgit *zúgúl-ì* ‘monkey’ (Jungraithmayr, Ibriszimow 1994).

Cush. C. **žag(g)ir-* ‘monkey’:⁸ Bilin *žäggir-a* (< **žangir-*?) | Khamir *sažer-a* | Khamta *ziäger-aa* | Qwara *žägir-aa* | Qemant *žegər-aa* || Aungi *zagr-i* | Damot *zagr-ee*.

► AADB 398.

5. Canines and hyenas

5.1. **?away-* or **yawa?*- (met.) ‘k. of canine’⁹

Sem. **?away-*: Hbr. **?i* (pl. *?iyyim*) ‘jackal’ [*Canis aureus*] || Syr. *bənāt ?away* ‘thoes, canes aurei’ [*C. aureus*] || Arab. *?ibnu-l-?awan* ‘animal regardé comme un mélange né d’un chien et d’un renard’ || Tgr. *?aw* ‘eatable wild animals’ | Amh. *yäyi* ‘hyena’ [*Hyaenidae sp.*], *awu* ‘hyena’s cry; hyena’ [*Hyaenidae sp.*] | Gur.: Chaha, Gyeto, Ennemor, Muher *awi* ‘wild animal, beast’.

Egyp. (MK) *iʔw* ‘dog’ (met. < **Vyw*?).

Chad. W. *(?)*iy-*: Warji *iyà-nà* | Kariya *ii* | Miya *i* ‘dog’.

Cush. E. **yawa?*-: LEC **yaw/ya?*-: Somali *éy* ‘dog’, *yéey* ‘wild dog’ [*Lycaon pictus*] | Boni *óy?* ‘dog’, *yeye?* ‘jackal’ [*C. aureus*] | Rendille *yááy* ‘wild dog’ [*L. pictus*] | Oromo *yeey-ii* ‘wolf; wild dog’ [*L. pictus*]¹⁰ | Konso *yoy-ta* ‘hunting dog’ [*L. pictus*] | HEC **yayy-* ‘hunting dog’ [*L. pictus*]: Sidamo *iyäy* | Hadiya *yoyy-akko* | Burji *yeyy-ée*.

► AADB 290. SED II No. 21.

5.2. **?aw/ys-* ‘k. of canine’

Sem. **?aws-*: Arab. *?aws-*, dim. *?uways-* ‘wolf’ [*Canis lupus*].¹¹

Chad. **?aws-*: W. **?as-*: Mupun, Angas *ās* | Sura *as* | Montol *?as* | Tala *ass* || E. **?us-*: Bidiya *?ùs-ú* ‘dog’.

Cush. **ya?s-* (met.) ‘dog’: N. **ya(?a)s-*: Beja *yaas* || S. **sV?ay* (met.): Iraqw *see?ay* | Gorowa *soo?ay*.

Omot. S. **?aws-*: Ongota *?óós-e* ‘African hunting dog; jackal’ [*Lyaccon pictus*; *C. aureus*].

► AADB 2938. Cf. Blažek 2007 #21; Stolbova 2019 #29 **?[a]s/c-* ‘dog’ (comp. to Arab. *?aws-*).

⁷ *k-* may continue both PAA **k-* and **k̥*.

⁸ Borrowed in S. Eth. as **ž/zangi/ar-* ‘baboon’ (Leslau III, 1979: 711]

⁹ Very likely descriptive.

¹⁰ Cf. *iyyaa* ‘k. of wild cat’.

¹¹ Cf. Geez *?/lawst, ?awsənt* ‘eagle, bird of prey’.

5.3. *?a/usk-ay- 'k. of canine or hyena'

Berb. *?usk-ay: Tazerwalt *uskai* | Izayan *usk-a* | Iznassen *uskai* | Ahaggar *osk-a* 'chien lévrier'.

Chad. *(Hu)sV_k(-ay): W. *sik-: Dera šiká(-nájnà) 'dog crying *nanna*, hyena' || C. *sak-ey: Bana sáká-tá 'jackal', Bachama sakéy | Gudu sakay 'dog' | Afade skè 'hyena' || E. *(H)usk-enj: Sokoro osk-enj 'hyena' [*Crocuta crocuta*] (Stolbova 2009 #187 *sV_k- 'dog, hyena, jackal').

Cush. E. *se(?)ek-: Yaaku seek-a 'hyena' [*C. crocuta*].

Omot. S. *?ask-i: Ari ?aksi (met.) 'dog'¹² | Ubamer aksi (met.) | Ongota ?aski 'dog'.

▲ Cf. Kuliak: Nyangi sak 'dog'.

► AADB 2716.

5.4. *ba?Vš- 'k. of canine or hyena'

Egyp.: Copt. (Boheiric) *boiši* (f.) 'vulpes' [*Vulpes sp.*], 'a desert animal, peut-être hyène' [*Hyaena hyaena*] (Vycichl 1983).

Chad. W. *bVž-am- 'hyena' [*Hyaenidae sp.*]: Ngizim bžàm-ù | Bade ?ž-bžàm-ón.

Cush. N. *ba?aš-: Beja ba?aš-o 'Fuchs, Schakal' [*Canis aureus*].

► AADB 4248; EDE II 148.

5.5. *bawih- 'k. of canine'¹³

Egyp. (BD) bħ-n 'k. of a dog'.

Chad. *bay/wH-: W. *bayH-: Tangale bay 'dog' || C. *bawH-: Chibak bou?-a, bùh-á 'Schakal' [*Canis aureus*].

Cush. N. *bayH-: Beja báyh-o 'Schakal, Fuchs, Canis vulpes' [*Canis aureus, Vulpes vulpes*] || E. *bay-: LEC: Dasenech báy-c, pl. bay-a 'jackal' [*C. aureus*] || S. *bawih-: Iraqw, Alagwa bah-a | Burunge bay-mo, pl. baw-u (< *bah-u, acc. to KM) 'hyena' [*Crocuta crocuta*] | Dahalo b̥wéh-a 'jackal' [*Canis aureus*].¹⁴

Omot. N. *biw-:¹⁵ Yemsa biw-á 'Schakal' [*C. aureus*].

► AADB 3774; Blažek 2003: 241; EDE II 147, 282.

5.6. *gVd- 'k. of canine or hyena'

(?) Sem. *gad-l- (with fossilized -l?): Arab. žadlā?- 'chienne' (BK 1 267).¹⁶

Chad. *gVd-: W.: Hausa góž-èe 'dog' | Ngizim gádá-múzái¹⁷ 'hyena' [*Hyaenidae sp.*] || C. *gVd- 'dog': Dghwede yəd-i, gód-è | Guduf yəd-à | Mofu gód-éy || E. *gVd- 'dog': Ndam gáy (< *gVyd-) | Somrai dò-gód-à, pl. górád-é | Mokilko gód-è, etc.¹⁸

¹² Cf. wúksak 'fox, jackal'.

¹³ Obviously related is the PAA verb *bwħ- 'to bark (dog)': Sem. *n-bħ: Akk. nabah-u, Hbr. nābah, Arab. nbħ, Gz. nabħa, etc.; Eg. bħn; Chad. C: Bura mbwuha, E.: Kera bəʔé; Cush. S.: Ma'a -boha (AADB 3774; cf. EDE II 282). While the noun *bawih- refers to various kinds of canine and even hyena, the PAA verb speaks in favor of a domesticated dog: it is unlikely that the PAA speakers had managed to preserve a special term for wild animals' howling and yowling as a significant notion for over ten millennia.

¹⁴ Beja *h* may continue both AA **h* and *ħ, *-ħ- in báyho is confirmed by -ħ- in Tgr. bāyhot, pl. bāyħi with the same meaning obviously borrowed from Beja; in W. Rift and Dahalo, *h* continues only AA **h*, not *ħ (acc. to Takács 2011: 115-16); however similar to the present root the S. Cush. forms may appear, they are to be regarded as a variant root *bayh-; in Dasenech, both AA **h* and *ħ yield Ø.

¹⁵ Both PAA **h* and *ħ yield Ø.

¹⁶ In Lane II 392, it is quoted as fem. of *?aždal- 'the hawk or an epithet applied to the hawk'.

¹⁷ múzái < Proto-Chad. *mVz- 'man, male'.

¹⁸ In CED #196, rel. to g(V)HVd- 'to bite'. Compared to Arab. gafd-at- 'wolf' referring to BK I 299 likely by mistake (there is no such meaning). In Lane Vol. 1: 11, there is ?abū žafd-at- 'the wolf', but this is no more than just

Cush. E.: LEC **ged-all-*: Oromo *gedall-o* ‘jackal’¹⁹ [*Canis aureus*].

Omot. S. **gud-r-*: Ari *gudr-i* ‘hyena’ [*Crocuta crocuta*].

► AADB 353. Cf. HSED №856; CED #196.

5.7. **kur(-ay-)* ‘k. of canine’

Sem. Eth. **karkur-* (redupl.): Tgr. *kurkur* ‘dog’, *kärakur* ‘young dog’ | Tna. *kurkur* ‘puppy, lion cub, whelp’.²⁰

Berb. S. **a-ykar* (met.): Ahaggar, Ayr, E. Wlm. *a-ikar* ‘jeune chien’.

Chad. **kuray-* ‘dog’: W. **ku/aray*: Hausa *kàré-e* | Zaar *kùraày-i* | Guus *kàráŋ* | Bokos *kyàr-a* ||

C. **ku/ir(ay)-*: Fali-Kiria *kár-i* | Higi *kur-é* | Hildi *kr-i* | Lamang *kírr-e* | Gisiga *kør-e* | Dugwor *kír-á* | Sukun *kr-a* | Bura *kil-a* | Buduma *køl-i* | Logone *kl-e*.²¹

Cush. **kuray-*: E. **kayr-* (met.): SA **kar-e*²² | LEC **kayr-*: Rendille *kar* | Baiso *kerr-e* | Arbore *kair, ker* | Dasenech *čir* | Dirayta *herr-aa*, etc. | Dullay **kar-*: Gawwada *haar-o* | Harso *her-o* | Tsamay *kar-o, kar-ito* ‘dog’ || S. **kuray-*: Alagwa *to-koray-mo* ‘bat-eared fox’ [*Otocyon mega-lotis*] | Burunge *ta-kuraaʔ-imo* ‘wild dog’ [*Lycaon pictus*] | Ma’ā *kuri* ‘dog’.

▲ Cf. Kanuri *keri*, Teda *kedi* ‘dog’.

► AADB 375; CED #455 (comp. to part of the Cush. terms and Tgr.), HSED 1434.

5.8. **kawit-* ‘dog’

Chad. W. **kawt-*: Hausa *kút-ii* ‘dog’ (used only in one set phrase) | Bolewa *kut-ì* | Dwot *kat* | Wangday *kàt* ‘dog’ (Jungraithmayr-Ibriszimow 1994).

Cush. **ku/it-* ‘dog’ E. SA **kut-*: Afar *kut-a* | LEC **kut-*: Konso *kút-a* | Mashile *ħút-a* || S. **kit-*: Asa *kit-e*.

► AADB 2944.

5.9. **kʷihān-* ‘dog’.²³

Chad. **kʷiHan-* ‘dog’: W. **kʷiHan-*: Fyer *kʷéej* || E. **kany-* ~ **kayan-*: W. Dangla *kàny-à* | E. Dangla *kāny-à* | Migama *kānný-à* | Mabire *kany* | Jegu *kány* | Birgit *káyàŋ*.

Cush. E. **kʷihān-*: Yaaku *kwehen* ‘dog’.

Omot. **kʷiHan-* ‘dog’: N. **ku/iHan-*: Wolaita, Gamu, Dawro, Zala, Malo, Dache, Koyra, Zayse, Gimira (Bench) *kyan* | Yemsa, Bworo *kan-a* | Kafa, Mocha *kun-anō* | Dizi (Sheko) *kean-u* | Mao (Hozo) *kan-a*, etc. || S. **kan-*: Dime *kēn-ε*, Galila *kan-i*.

► AADB 2195. Cf. CED #441 (Chad. and Omot.), HSED #1425, 1511.

5.10. **KVʒim-* or **KVʒim-* ‘dog’

Egyp. (MK) *tzm* (< **kVʒVm-* or -*ʒ-*) ‘dog’.

Berb. **a-Ku(r)zi/un*: Siwa *a-gurzəni*, *a-qurzini*, *əl-gurazən*, *lu-grāzén* | Audjila *a-ȝzin* ‘dog’ | Semlal *i-kzin* | Izayan *a-kzin* | Seghrushen *a-qqzin* | Rif, Snus, etc. *a-qzin* ‘young dog, puppy’ | Shawiya *a-ȝərzul* | Qabyle *a-qžun* ‘dog’.

(?) Chad. C. **kazim*: Bura *kazim* ‘a male baboon, monkey, or dog’.

a figure of speech. Another comparison, with Qabyle *agdi* ‘dog’, is also wrong since it is from **aydi*, the main Berb. term for ‘dog’.

¹⁹ Cf. also Somali *godgoddo* ‘type of shark’.

²⁰ Cf. *wäkaru, wäkarya* ‘fox’ < Saho *wakari* ‘jackal’ [*Canis aureus*]?

²¹ < **kVr-* in CED #455.

²² Cf. Saho *wakari*, Afar *wàkri* ‘jackal’ [*Canis aureus*].

²³ Very likely related is Canarian **kun-*: Gran Canaria *cuna* ‘dog’ | Tenerife *cancha* ‘little dogs’, *cuncha* ‘chien’ (-*cha* < *-*ta* is probably a diminutive suffix).

Cush. C. **gižim-* and **gižim-* ‘dog’: Bilin *gidíŋ*, pl. *gižíŋ* | Khamir *gizíŋ* | Khamta *gózəŋ*, pl. *gəzəŋ* | Qwara *gezeŋ* | Qemant *gəzəŋ* | Kailiňa *gəzəŋ* | Waag *gízin* | Falasha *gazíŋ* || Aungi *gséŋ* | Kunfäl *kassan̩*.

► Cf. Sandawe *gwece* ‘wild dog’.

► AADB 2699.

5.11. **wahr-* ‘k. of canine; hyena’²⁴

Egypt. (late) *whr.t* ‘Hündin’ (prop. name) | Copt. *?uhor* ‘dog’.

Berb. **a-wwur* (<*a-wHur*): Ahaggar *ă-ggur* | E. Tawllemmet *a-ggur* | Ayr *é-ggur* ‘chacal’ [*C. aureus*]²⁵.

Chad. **hayr-* ‘dog’: C. **har-*: Zina *hár-i*.²⁶

Cush. **warH-* ‘hyena’ [*Hyenaenidae sp.*]: E. **warH-ab-*: LEC **warH-ab-*: Konso *oray-ta* | Somali *waraab-e* | Oromo *waraab-esä* | Rendille *warab-a* | Dirayta *waraab-e* | Dullay **war(H)-ab-*: Gaw-wada *oraap-atte* | Harso *araap-ičče* | Gollango *oraap-atte* || S. **war-*: Ma’ā *war-é*.

► Cf. Sum. *ur* [dog] (PSD, uncertain), *ur, ur₅, ur.ri* ‘hairy animal, dog, lion, etc.’ (EDS #2782), *ur* ‘chien’ (LSF).

► AADB 3189.

5.12. **wanš-* ‘k. of canine’

Egypt. (OK) *wnš* (met.) ‘wolf’ [*Canis lupus*].²⁷

Berb. **wVššin* (met. with redupl.) ‘jackal [*C. aureus*]’: Ghadames *weššin* | Qabyle, Nefusa *uššen* | Semlal *uššən*, etc.

Cush. E. **wašš-*: HEC **wašš-* (met. < **wanš*): Sidamo *woš-iččo* | Kambatta *woš-ičču* | Burji *wačč-o*, pl. *wašš-a* ‘dog’²⁸ | Dullay **woš-*: Gollango *oš-e* ‘Hyänenhund; Lycaon apictus somalicus’ [*Lycaon pictus*].²⁹

► Blažek 2008 cites NS parallels: Nara *wos*, Taman: Merarir *wiis* ‘dog’ which may be comparable with 4.3. **?aws-* ~ **yaɻs-* ‘k. of canine’ as well.

► AADB 291. Cf. Blažek 2007 #21.

²⁴ Cf. NAA **harnag-* ~ **hirguan-* ~ **gurhan-*: Sem. **harnag-*: Syr. *harnāg-ā* ‘golden jackal’ [*Canis aureus*] (cf. also Arab. *żāriḥ-at-* < **gariḥ-* ‘bête ou oiseau de chasse (chien, guépard, faucon)’); Canarian **hir(g)wan-*: Palma *hirguan* ‘...demonio in figura d’uomo lanuto’, *irvene* ‘el demonio en figura de perro lanudo’, *irvene* ‘apparitions’, *yrvene* ‘el Diablo’ (Wölfel 1965: 484, entry “Der Hund”); Chad.: C.**gurhan*: Hildi *gərhaŋ*, ‘jackal’ [*C. aureus*], Musgu *hérgē*, Munjuk *hirge* ‘dog’, Musgoy *gúrnai*, *ṇúrnai*, Masa *ṇurnaita*, Banana *g̃mira*, E. **gurnV*: Kera *gòrnòy*, Kwang *gōrény*, Kabalai *gwòrrnày* ‘hyena’ [*Crocuta crocuta*] (Jungraithmayr, Ibriszimow 1994: 107, 205; CED #224a.). The entire bunch of synonyms with somewhat similar consonantal roots, or “root variants”, may point to an ancient tabooing of a term denoting a special kind of canine.

²⁵ In Naït-Zerrad 2002: 856, placed under **gwr*, though in Foucauld I: 480, the grapheme **X** (usually transliterated as *gg*) is used; in Ahaggar *tifinav* it renders the voiced stop *g* originating from *-*qʷʷ* < *-*ww* < Proto-Berber and Proto-Afrasian **w* and thus opposed to the voiced velar fricative *ɣ* (rendered by **T**) < Proto-Berber and Proto-Afrasian **g*. There are also such forms as the somewhat enigmatic Senhadja *i-uhar*, Ait Tuzin *a-whar*, Ait Warain *uhar*, etc. ‘fox’, formally well compatible with this root but containing an unusual laryngeal, normally lost in North Berber.

²⁶ In Stolbova 2019 #153, the Zina term is combined under **hVr-* ‘jackal’ with Musgu *hérgē*, Munjuk *hirge* ‘dog’ analyzed after H. Tourneux (personal communication) as **hir-ge* ‘jackal+house’ (cf., however fn. 25 above) and compared to the Egyptian and Coptic terms and Berber *-*whar* ‘fox’ (see fn. 26) after EDE I: 144.

²⁷ Cf. also NE *iš* pl. ‘dogs pulling the ship of the Sun-god’.

²⁸ Cf. also Darasa *walčo*, *warša* with comments in Blažek 2007 #21: -*r/-l-* originating via dissimilation of the primary geminate.

²⁹ Omot. N. **wayši*: Haruro *wayše*, Mao (Hozo) *wiši*, (Sezo) *wiš(s)i* ‘dog’ – probably borrowed from HEC.

6. Felines

6.1. **ažur-* ‘k. of feline, hyena or viverra’

Sem. **?a(n)dar-*: Akk. *azar-u* (*azzar-u*) ‘lynx’ [*Vulpes sp.*] || Gz. *?anzar* ‘wild cat’ [*Felis silvestris*].

Berb. S. *-zur-*Vy* ‘hyena’ [*Hyaenidae sp.*]: Ahaggar *tă-hûr-i* | Ayr, E. Wlm. *ta-zor-øy*.

Chad. W. **žažur-* (met.): Galambu *zər-đm* | Warji *žara-waš* ‘lion’ [*Panthera leo*] | Zul *zažär-i* ‘like a hyena or civet’ || C. **žVr-*: Bachama *žär-á* | Bata *žír-e* | Buduma *zāzúr-mà* (redupl.) ‘leopard’ [*P. pardus*] || E. **žur-* ‘id.’: Gabri *žur* | Mubi *žyúr-úk*.

Cush. E.: LEC **?adur(r)-*: Oromo *adurr-ee* | Dasenech *adur-e* ‘viverra’ [*Viverra sp.*]³⁰ ||

(?) S. **žižVr-* (met.) ‘viverra’ [*Viverra sp.*]: Alagwa *žežir-a* | Burunge *žižerar-e*.³¹

Omot. N. * *ži(?)ar-*: Kafa *yeer-oo*, *žär-o* ‘viverra’ [*Viverra sp.*].³²

► SED II No. 9; AADB 399.

6.2. **ʕariw-* ~ **ʕiraw-* ‘k. of feline’

Sem. **ʕariw*: Arab. *ʕurw-at-* ‘lion’ || Tna. *waʃro* (met.) ‘leonessa’ (Bassano 1918: 653) || Mhr. *?áyr-i*, pl. *?arew-at* | Jib. *ʕér-i* ‘tom-cat’.

Berb. **Hawr-* ‘lion’: Ghadames *abur* | Ahaggar, Ayr, E. Wlm. *a-har* ‘lion’ (Prasse 1969 #362).

Chad. C. **Hiraw-*: Musgu *à-hiráw* ‘leopard’ | Munjuk *a-hraw* ‘panther’.³³

Cush. E.: LEC: Somali *ʕúrr-i* ‘tom-cat’.

▲ In spite of scarce representation, the relatively infrequent combination of radicals seems to confirm the comparison. Note the same meaning in MSA and Somali (a borrowing?).

► SED II No. 41; AADB 2658.

6.3. **bažay-* ‘leopard or lion’

(?) Eg. (MK) *bȝ* (if <**bV?*-) ‘panther’ [*Panthera pardus*].

Chad. **bay-*: C.: Gude *bwáy-à* || E.: Mubi *boy-á* ‘leopard’ [*P. pardus*].

Cush. S. **baʔ-*: Dahalo *baʔ-i* ‘lion’ [*P. leo*].³⁴

Omot. **bay-* ‘lion’ [*Panthera leo*]: N.: Sheko *bay-a* | Nao *bay-ê* || S.: Dime *biy-u*.

► Cf. EDE II 22.

6.4. **baʔis-* ‘k. of feline (*Felis silvestris*)’

Sem.: Arab *bass(-at)-* ‘domestic cat’.³⁵

Egypt. (OK) *bȝs.t.t*, name of the cat-goddess Bastet.

(?) Berb. N.: Nefusa *bišiu* ‘gatto’ (isolated).

Chad. E. **bi(?)s-* ‘cat’: E. Dangla *bíísí* | Migama *bíísú*.

Cush. N.: Beja *bēs-a*, *biss-a* ‘cat’ || E.: HEC: Sidamo *bas-u*, *bas-o* ‘cat’³⁶ || S.: Qwadza *baʔas-iko* (pl.) ‘cheetah’.³⁷

▲ The Nefusa and E. Chad. forms are likely inter-borrowings.

► AADB 4246; EDE II 86–7.

³⁰ Sidamo *adurre* ‘cat’, Dullay **?adurr-* (Dihina, Gollango *aturre* ‘wild cat’): the Sidamo and Dullay forms look like Iws. from Oromo in spite of the difference in meaning.

³¹ The two W. Rift forms absent from Kiessling, Mous 2003 are cited in Dolgopolov 1973: 300 after Fleming.

³² A Iw. < Cush. ?

³³ Acc. to CED 42, *h* in this language group can continue **ʕ*.

³⁴ Cf. C. **?ib-* (metathesis?): Qwara *ib-ā*, Qemant *yiv-a* ‘leopard’ [*Panthera pardus*] — rather a metathesis < **?ib-* than < **l-b* suggested in EDE II: 22.

³⁵ Cf. Amh. *biss* ‘interjection pour chasser un chat’.

³⁶ Cf. also *basurr-i* ‘cat’ (composed < *bas* and *ʕur-*? Cf. **ʕur-* ‘k. of feline’).

³⁷ Cf. *paʔas-iko* ‘cat’.

6.5. *da(?)m- 'k. of feline'

Sem. **dam-*, **dimm-* and **dumam-* (redupl.): Akk. (SB) *dumām-u* (*tumām-u*) ‘a wild animal’ (CAD d 179), ‘Gepard’ [*Acinonyx jubatus*] (AHw: 175) || Arab. *dam-*, *dimm-at-* ‘chat’³⁸ || Gz. *dəmm-at* | Tgr., Tna. *dəmm-u* | Amh. *dəmm-ät* ‘cat’.

Chad. **dam-*: W. **dam-*: Yergum *dam-unj* ‘leopard’ [*Panthera pardus*] and *(?Vn-)da/um-: Sura *ndùmú*, Gerke *damu*, Ankwe *tumu* ‘hyena’ [*Crocuta crocuta*]³⁹ || E. **dam-* and **damd-* (redupl.): Lele ſ̄em (< *dem-?) ‘caracal’ [*Caracal caracal*] | Sokoro *dámd-ē* (redupl.) ‘leopard’ [*P. pardus*].

Cush. S. **du?um-* ‘leopard’ [*P. pardus*]: Iraqw, Alagwa, Burunge *du?um-a* | Asa *du?um-ok* | Qwadza *du?um-ayi*.⁴⁰

► SED II No. 70; AADB 350.

6.6. *giwar- ‘k. of feline’

Sem. **girr-*, **gu/ary-* and **girgVr-* (redupl.): Akk. *girr-u* ‘lion’ [*Panthera leo*] || Phoen. gr ‘lion whelp’ | Hbr. *gūr* ‘cub (lion, jackal)’, *gōr* (pl. only) ‘lion's cub’ || Aram. (D. Alla) gr ‘whelp (of a fox)’ | Syr. *gury-ā* ‘catulus (leonis, canis, suis, serpentis)’ | Mand. *guri-a* ‘whelp, cur, young dog, pariah-dog’ || Arab. ſ̄arw-, ſ̄irw-, ſ̄urw- ‘petit de chien, de lion ou de toute autre bête carnivore’⁴¹ || Tgr. *gərž-ən*, pl. *gärägg-ən* ‘cub of lions or of leopards’ | Harari *gärgōr-a* (also *gän-gōr-a*) ‘leopard’.

Chad. **giwar-*: W. **giwar-*: Dwot *gewar* ‘an animal smaller than civet’ || C. *(?a-m-)gwar-: Hwona ?àm-ŋwara, ?a-ŋwara ‘cat’ | Fali-Muchella *mùŋ-gùr-i* | Fali-Bwagira *mùŋ-gwùr-?in* ‘wild cat’.

Cush.⁴² (a) E. **gir-* ‘cat’: LEC **gir-*: Dirayta *kiro-ta* | HEC **gir-*: Burji *giraa?w-ee* (met. < *?a-giraw-?)⁴³ and (b) **gar-m-* ‘lion’ [*Panthera leo*]: LEC: Konso *karm-aa* | Dirayta *karm* | HEC: Burji *gárm-i* | Dullay: Gawnada-Dalpena, Harso, Dihina, Gollango *kárm-o*.

Omot. (a) N. **gawar-* ‘cat’: Zala *gawar-ya* | Dawro, Zaysse *garaw-a* | Malo, Gamu, Dače *gawa-ra* | Zaysse *garaw-a* | Koyra *giraaww-e?*⁴⁴ and (b) N. **gar-m-* ‘lion’ [*P. leo*]: Zaysse, Koyra *garm-a*.⁴⁵

► AADB 2629; cf. SED II No. 82.

6.7. **labi?*- ‘lion’⁴⁶

Sem. **labi?*-: Akk. *labb-u* (*lab?-u*, *lāb-u*) || Ugr. *lb?-u* ‘lion’ [*Panthera leo*] || Hbr. *lābī(?)* ‘lioness’ || Sab. *lb?* ‘lion, lioness’ || Arab. *luba?-at-*, *labu?-at-*, *libw-at-*, etc. ‘lionne’.

³⁸ Regarded by some authors as a lw. from Gz.

³⁹ Cf. also Hausa *dāmis-à* ‘leopard’ and Berb. Tuareg *daməs-a* ‘panther’ (obviously inter-borrowing) with non-etymological -s-.

⁴⁰ Beja ſ̄imo, *dimmo* ‘cat’ – perhaps < Eth. or Arab. Cf. Bilin *dəmmu* (pl.), Qwara *damyā*, Qemant *damaya* ‘cat’; whether the Eth. term is the source of the Agaw one or the latter is inherited is hard to decide; SA **dumm-*: Saho *dummu*, Afar *dumoo* ‘cat’ can be Ethiopisms or genuine terms. LEC: Somali *dummad* ‘cat’ is likely < Arab. or Amh. HEC: Hadiya *aduuna*, *adun-čo*, Kambatta *adan-ču*, *adani-ta* ‘cat’, both <?a-da/un-t-, likely <?adum-t-, are probably genuine.

⁴¹ Cf. Arab. ſ̄arwal- ‘serwal, lynx’ [*Caracal serval*, *C. caracal*], likely related with fossilized -l suffixed.

⁴² Cf. S. Cush.: Dahalo *ŋgūro* ‘small black longtailed rodent’ (<?a-ŋgur-?).

⁴³ Sasse (1982: 85) compares it with a completely identical Koyra word; one of the two words is undoubtedly borrowed, but which one is hard to decide. The ending in -? seems uncommon in both languages.

⁴⁴ See fn. 170.

⁴⁵ While the difference in stem patterns in E. Cush. **gir-* and N. Omot. **gawar-* ‘cat’ more than likely points to a common origin, full similarity in reflexes of **gar-m-* ‘lion’ likely implies borrowing (in either direction).

⁴⁶ Cf. metathetic (?) **ribal-* attested in Arab. and Chad., either to be reconstructed at the NAA level or a result of independent parallel processes, accounted for by a very low compatibility of l and r in most AA languages: Sem.: Arab. *rībāl-* ‘lion; féroce, rapace (loup)’ and Chad.: W.: Sura *r̄ch̄ol* ‘wild cat’, (?) Hausa *râbbî* (with the fallen -l?), C.: Zeghvana *árval*, Glavda *árvar-e*, Gava *?urwvar-a*, Lamang *árvar-è*, E.: Somrai *lārb-á* (met.) ‘leopard’ [*Panthera pardus*].

Egyp. (OK) *rw*⁴⁷ ȝbw, inscription under the image of a lion⁴⁸ | Copt.: Bohairic, Sahidic *laboy* ‘lion; bear’ [P. *leo*; *Ursus arctos*].

Chad. *la/ib-: W. *lab-: Tangale *lab-ata* (f.) ‘lioness’ [P. *leo*] || C. *(?a-)lib-ar-⁴⁹ ‘lion’ [P. *leo*]: Hwona *lifār-ì* | Margi ȝa-livàr-i | Chibak ?a-lvàr-i | Kilba lēvàr-í | Kapsiki nìvèr-i (dissim.) | Higi-Nkafa lìvèr-i | Gude lìvyàr-á.

Cush. E.*lu/ib- ‘lion’ [P. *leo*]: SA *lub-ak-: Saho, Afar *lubaak* | LEC *lib-ah-: Somali *libah* | Jiddu libáah-u.

▲ Cf. PIE *liw- ‘lion’.

► SED II No. 144; HSED 1636; EDE I 61; CED #555. AADB 2279.

6.8. *layč- ‘k. of large feline’

Sem. *layt- ‘lion’ [Panthera *leo*]: Hbr. *layiš* || Aram.: Sam. *lyt* | Jud. *lēt-ā*, *layt-ā* || Arab. *layt-*.

Chad. *lič-: W.: *liš-um: Sura *lùšùm* | Chip *lišim* ‘leopard’ [P. *pardus*].⁵⁰

Cush. N. *loliš (redupl.): Beja *loliš*, *noliš* (dissim.) ‘cat’.

► AADB 2646; cf. SED II No. 147.

6.9. *mary- or *mayr- ‘k. of feline’

Sem. *namir- (<*na-mir- or *na-mayr- with the fossilized prefix) ‘leopard’ [Panthera *pardus*]: Akk. *nimir-* (*nammar-*) ‘panther’ || Hbr. *nāmēr* ‘leopard, panther’ || Aram.: Anc., Off. *nmr* | Bibl. *nəmar* ‘panther’ | Mand. *namar* (*nimar*, *namr*) ‘leopard’ | Sab. *nmr* ‘leopard, panther’ | Hdr. *nmr* ‘panthère’ || Arab. *nimir-* ‘panthère’, *namir-* ‘léopard, panthère’ || Gz. *namr* | Tna., Tgr. *näbri* ‘leopard’ | Amh. *nämr*, *näbər*⁵¹ ‘lynx’ [Caracal *caracal*] | Sel. *näwər* | Wol. *näwr*.⁵²

Egyp. (OK) *mȝy* ‘lion’ [Panthera *leo*] (if < *mVry).

Chad. *mary- and *mumur-/*murum- (redupl.): W. *mumur-: Dera *mūmur-u* ‘cheetah’ [Acinonyx *jubatus*] | Polchi *mur* ‘jackal’ [Canis *aureus*] | Bokkos *mùrùm* | Sha, Daffo-Butura *mùrùm* ‘hyena’ [Crocuta *crocuta*] || C. *mary-: Mafa *mariy-žéle* ‘lion’ [Panthera *leo*] | Lame *mēr* ‘serval’ [Caracal *serval*], *méri-án* ‘wild cat’ | Peve *méri-án* ‘Id.’ | Zime-Dari *mīrēr* ‘genette’ [Genetta sp.].

Cush. (a) *mary-, *mawir- and *marir- (redupl.): E.: LEC *mawr-: Oromo *mōr-ē* ‘civet(-cat)’ [Civettictis *civetta*] | Dasenech *mor* ‘lion, leopard’ || S. *mir- and *marir- (redupl.): Gorowa *marir-ika* ‘leopard’ [P. *pardus*] | Alagwa *mariy-amo* ‘wild cat’ | Asa *mer-ok* ‘lion’ [P. *leo*]; (b) N. *mir-al-: Beja *miral-ai* ‘cheetah’ [Acinonyx *jubatus*] | E.: Dullay *mir-l-: Tsamai *mirle* ‘leopard’ [P. *pardus*].⁵³

▲ Cf. NS *mEr ‘leopard, lion, cat’; Songhay *mar* id.; ESud.: Nandi *merindo*, Suk *meril* ‘leopard’; Kuliak: Nyangi *merihl* id.; SNil.: Tatoga *marir-d*, Suk *mèril*, Sogoo *melil-tɔ* (quoted in EDE III: 37). In spite of the striking similarity between these and some of the AA forms, all seem genuine in their families.

► AADB 2305; SED II No. 164. Cf. HSED 1760 and EDE III 37, 134-5.

6.10. *sawr- and *sarw- ‘k. of feline’

Sem. *šur-ān- ~ *šinnawr- (met.) ‘wild cat’ [Felis *silvestris*]: Akk. *šurān-u* ‘wild cat’ || Aram.: Anc. *šrn* ‘wild cat’ | Jud. *šunnār-ā*, *šūrān-ā* ‘cat’ | Syr. *šūrən-ā* ‘felis; mustela, animal quod vorat

⁴⁷ Eg. *rw* (Pyr.) is also ‘lion’ (unless < *IVw) < *(?a-)rVw- ‘k. of large feline, lion’ not quoted here since it is rather a NA than a PAA root (with only one parallel in SA: Cush. E.: LEC: Somali *ār* ‘lion’ which is probably not enough for a reconstruction at the PAA level).

⁴⁸ Also (18 Dyn.) ȝby ‘panther’ [Panthera *pardus*] (if < *IVb(V)y-).

⁴⁹ With the extension -ar – acc. to CED #555, a marker of harmful animals.

⁵⁰ Cf. metathetic E. *?a-čil-: Bidiya ?àčil-o ‘serval’ [Caracal *serval*].

⁵¹ The parallel variant root *nabr- in Mod. Eth. is likely a result of dissimilation by nasality.

⁵² Mhr. *námer* ‘leopard, tiger’ and Hrs. *nemr* ‘leopard’ are likely Arab. lws.

⁵³ S. Omot.: Ongota *mirila*, *morle* ‘serval, genet’ is a lw. from Tsamai.

gallinas', *šūnār-ā* 'felis' | Mand. *šunar-a* 'cat' || Arab. *sunnār-*, *sinnawr-* 'chat' || Mhr. *sənnáwr-ət*, Hrs. *sennōr-eh* | Jib. *sínór-t* | Hbt. *sənnóor-ət* 'cat'.⁵⁴

Chad. **sawar-*: W. **sa(w)r-* and **sasar-*, **sawawr-* (redupl.): Hausa *sar-a*, *sawawar-a* 'civet' [*Civettictis civetta*] (Cosper 1994 #264)⁵⁵ | Polchi *šišer* 'smaller than civet' | Daffo-Butura *šúwír* 'Wildkatze' [*Felis sp.*] || E. **sawar* ~ **sarar-*: Tumak *šàwàr* 'chat doré' [*Caracal aurata*] | Dangla *sàrààr-à* 'panthère femelle' [*Panthera pardus*].

Cush. E. **sarw-* and **warwars-* (redupl. and met.): Dullay **sar-iko*: Gawnada, Gobeze, Harso, Gollango *sar-iiko* 'leopard' [*Panthera pardus*] || Yaaku *warwars-an* (met.) 'serval' [*Caracal serval*].

Omot. N. **sawr-*: Ganjule *šuur-o* 'cat'.⁵⁶

► AADB 2651; SED II No. 206.

There are two more terms for large felines reconstructed by Václav Blažek (2013) and qualifying as PAA according to the present paper's criteria (representation in both NAA and SAA branches): **camik/y/h-* (Cush. C., E.; Omot. N.; Chad. C., E.) and **ʒi(n)g-(um)-* (Arab.; Cush. E.; Chad. W., C.)

7. Other mammals (a selection)

7.1. **?V(n)čaw-* 'k. of smaller carnivoran or rodent'⁵⁷

Sem. **?ay(n)ṣaw-*: Akk. (OB on) *ayāṣ-u* 'weasel' [*Mustela sp.*] || Gz. *?anṣaw-ā*, *?anṣew-ā*, *?anṣow-ā* 'mouse'⁵⁸ and 'weasel' [*Mustela sp.*] | Tna *?ančow-a* 'rat, mouse' | Tgr. *lanṣay*, *lanṣay*, | Amh. *ay(ə)t* 'mouse'.

(?) Berb. S. *-*dVway*: Ayr, E. Wlm. *e-dəwi* 'jerboa' [*Dipodidae sp.*].

Chad. W. **(Ha-)Ciy-*: Hausa *çiy-ō* 'field rat' | Sayanchi *ààcó* 'mouse' || C.: Musgu *ausi* 'Maus'.

Cush. C. **?i(n)čaw-*: Bilin *inšuw-aa* | Khamir *iečuw-aa* | Khamta *ačuw-aa* | Qemant *yešw-aa* || Aungi *enç-aa* | Damot *inç-ii* 'mouse' || E.: LEC **wawač-* (met.): Oromo *wawwač-oo* 'mongoose' [*Herpestidae sp.*].

Omot. N. **?i(n)čaw-* 'rat': Wolaita *uça-a* | Kafa *ičo-o* | Bworo *inčo-o*, *iinc-a* | Gimirra *uč/č* | Dizi (Sheko) *iičč-o*.

► SED II No. 26; AADB 379.

7.2. **?andaw-* 'mouse'

Chad. C. **ma(n)dVw* (likely < coll. **ma-?a(n)daw-*) 'rat': Mofu *m-àndùw-áŋ* | Gisiga *m-onduw-áŋ* | Muktele *m-ádàw-á* | Matakam *m-ùdùw-à*.

Cush. E. **?andaw-*: SA **?andaw-*: Saho *andaw-a* | Afar *andaw-aa* 'mouse, rat'.⁵⁹

► AADB 285.

7.3. **?ar-* 'hare'

Sem. (a) **?ar-an-*: Arab. (pl.) *?arānⁱⁿ* || Jib. *?ern-í* 'hare' [*Lepus sp.*];⁶⁰ (b) **?ar-n-ab-* 'hare' [*Lepus sp.*]: Akk. (OAKK. on) *arnab-u* (*annab-u*) || Hbr. *?arnäb-ät* | D.-Alla *?rn̥b-n* (pl.) | Syr. *?arnəb-* ||

⁵⁴ The MSA forms can be Arabisms.

⁵⁵ Boghom *sawawara* 'like a hyena or civet' is most likely < Hausa.

⁵⁶ Isolated in Omotic but, perhaps, genuine: borrowing from E.Cush. semantically and phonetically improbable.

⁵⁷ *-č instead of *-ç is reconstructed mainly based on the Berb. forms: if they belong here, d can continue AA *č (beside AA *t) but not *ç. In Akk. and Eth., as well as in Oromo, reflexes of *č and *ç coincide; in Chad. they remain obscure in the intervocalic position (but coincide in Hausa); the Agaw and Omotic reflexes are contradictory.

⁵⁸ Also *hanṣaw-ā*, *hanṣ-e* id. with the fossilized prefix h-.

⁵⁹ Cf. LEC **?antu-*: Oromo *antu-ta* 'mouse'.

⁶⁰ Cf. also Aram.: Syr. *?arnāṣā* 'mus magnus', perhaps related with a non-etymological -f.

Arab. *?arnab-* || Gz. *?arnāb* | Har. *ḥarbāññ-o* (met.) | Gur. **arbäññ-ä* (met.)⁶¹ || Hbt. *harniib* | Mhr. *harnáyb* | Hrs. *heyneb*.⁶²

Egyp. (old) *wn* ‘hare?’⁶³

Chad. (a) **?arn-*: W.: Hausa *ánná-kó* (assim.) ‘a variety of small hare’ [*Lepus sp.*];⁶⁴ (b) **?a(n)bar-* (met.) and **nabir-* (> **ribun-*): W. **?a(n)bar-*: Gerka *tu-bbar*⁶⁵ | *ti-haar* (<**ti-ba?ar* or **ti-?abar*) | Dera *búr-kiw* || C. **bir-*: Kapsiki *vír-a* ‘rabbit’ [*Lepus sp.*] | Podokwo *viŵr-a* ‘lapin’ [*Lepus sp.*], etc.; **nabir-* and **ribun-* (both met.) ‘hare’ [*Lepus sp.*]: Wandala *navir-e* | W. Margi *ta-ribuna* | Malgwa *navire* | Wandala *nàvir-e* || E.: Mobi *tì-bèr* ‘rabbit’ [*Lepus sp.*] | Mubi *hombur-o* ‘rabbit’ [*Lepus sp.*].

Cush. **?ar-*: N. **?ar-*: Beja *ar-aat* ‘young hare, leveret’ || C. **b/mäntäl/r-* (met. < **ta-rnab-*) ‘hare, rabbit’ [*Lepus sp.*] | Bilin *mäntälä-rä* | Khamtanga *bitl-a* | Qemant *bäntür-a* (Appleyard 2006: 79-80) || S.: Alagwa *?orh-oo* | Burunge *?oro?oo* ‘big hare sp.’ [*Lepus sp.*].

▲ Cf. PKoman **warVn-* ‘hare’. Multiple assimilations and metatheses may be due to poor compatibility of *r* and *n* in the same root, while various root extensions may be accounted for by assuming tabooing of the hare’s name as an object of hunting or a totem.

► SED II No. 14, AADB 3477; EDE I, 44; Stolbova 2019 #26; CED #11.

7.4. **bawr* - ‘k. of a large carnivorous animal’

Sem. **ba(r)bar-* (redupl.):⁶⁶ Akk. *barbar-u* ‘wolf’ [*Canis lupus*] || Arab. *babr-* (pl. *bubūr-*) ‘espèce de chacal qui conduit le lion sur la piste de la proie’ [*C. aureus*], *?al-barbār-* ‘lion’ [*Panthera leo*].⁶⁷

Berb. **barr-an*: Ahaggar *ă-barr-âñ* ‘chat sauvage’ (not in Foucauld 1951-52) | Shilh *a-br-an* ‘wild cat’⁶⁸ | Shilh *a-bayrr-u* ‘fox’ (Naït-Zerrad 1998: 146).

Chad. **bawr-*: W. **bawr-*: Hausa *bär-ū* ‘hyena’ [*Crocuta crocuta*] | Sura *m-bóór* | Angas *bwār* ‘lion’ [*P. leo*] | Mupun *pùpwór* | Tangale *par-i* ‘cheetah’ [*Acinonyx jubatus*] | Ngamo *bàràyr-iyà* (redupl.) ‘wild animal’ | Zul *m-bor-i* | Fyer *?m-bwaar* ‘lion’ [*P. leo*] || C. **ma-bawr-*: Bura *mo-bul-u* (*l* < **r*) | Mwulien *mibür-mò* | Bachama *mbur-umay* ‘hyena’ [*C. crocuta*] | Mofu *má-bár-* ‘panther, lion’ [*P. pardus, P. leo*] | Gisiga *mo-bor* ‘lion’ [*P. leo*] || E. **bawr-*: Dangla *bìur-ì* ‘lion’ [*P. leo*] | Migama *bóòr-ú* | Bidiyo *bóor-e* | Mubi *bör-ì* ‘hyena’ [*C. crocuta*] | Birgit *bàr-á* | Toram *bar-a* ‘jackal’ [*Canis aureus*].

Cush. **bawr-*: S. **bawr-*: Dahalo *bórá-a* ‘any dangerous animal’.⁶⁹

▲ Cf. Sum. *urbara* [wolf], wr. *ur-bar-ra*; *ur-bar*; *ur-bar-ra^{sar}*; *ur-ba-ra*; *ur₂-bar-ra* (PSD), *urbar.ra*, *ur.bar*, *ur.bar.ra* ‘wolf’ [*Canis lupus*] (EDS: 304), *ur-bar-ra-k*, *ur-bar-ra* s. ‘loup’ (LSF). Cf. P.Masai **-barie* ‘jackal’ [*C. aureus*].

► AADB 1863, 2621. Cf. HSED 246; EDE II 22, 148 and Stolbova 2021 #281 (compared to Berb.: Ghadames *a-bur*, Ghat *ahər*, Ahaggar *a-har*, etc. ‘lion’; comparison debatable).

⁶¹ All of the above Eth. forms were considered Arabisms by Leslau (Leslau 1987: 38), though it seems correct only for Gz. Cush. E.: HEC: Burji (*h*)irbáan-čoo ‘rabbit’ [*Lepus sp.*] and Omot. N.: Wolaita *hirbaan-e* ‘hare’ [*Lepus sp.*] are Eth. loans.

⁶² In MSA, *ḥ-* is an article before **?-.* Cf. also Ugr. *?anhb* ‘hare ?’ (more likely ‘snail’) and Arab. *ḳarnab-*, Gz. *ḳarnab* ‘hare’ obviously related with enigmatic **k-*.

⁶³ The hieroglyph for *wn* depicts a hare; acc. to EDE I: 44, perhaps <*wñn* <**wrn*.

⁶⁴ Acc. to CED #11, < **?arnau-k-* < **?arnab-k-*, assim.; however, there are no traces of *-u-*. Likely related is C.: Gude *ùrinjá* (<*?urin-*) ‘type of mouse or rat’.

⁶⁵ Acc. to CED #11, <**tu-nbar-*, with metathesis and assimilation.

⁶⁶ Cf. Sem. **bVrbVr-* ‘to hawl, roar’.

⁶⁷ Cf. also hubayrat- ‘hyène’ [*Hyaena hyaena*].

⁶⁸ Both quoted in EDE II 21, not in Naït-Zerrad 1998.

⁶⁹ Yaaku *barié* ‘jackal’ [*Canis aureus*] is a lw. from Masai.

7.5. *čap- ‘k. of smaller carnivoran or rodent’

Sem. *tap-an- ‘rock hyrax’ [*Procavia capensis*]: Hbr. šāpān ‘rock badger, hyrax, dassie’ [*P. capensis*] || Mhr. tōfən, Jib. tōfun ‘rock hyrax’ [*P. capensis*].

(?) Chad. W.: Boghom sop⁷⁰ ‘rabbit’ [*Lepus sp.*].

Cush. *čap-: E.: LEC: Oromo šuff-ee⁷¹ ‘k. of badger, ratel’ [*Mellivora capensis*] || S. *čap-: Burunge čaap-u ‘ground squirrel’ [*Spermophilus sp.*] | Alagwa cap-ù ‘civet’ [*Civettictis civetta*].

Omot. N. *šif-: Kafa šif-ō ‘faina (beech marten)’⁷² | Dizi (Sheko) šimf-a⁷³ ‘mouse’.

► AADB 3908; SED II No. 240.

7.6. *dab- ‘k. of large animal’

Sem. *dabb- (redupl.) ‘bear’ [*Ursus arctos*]: Akk. dab-u (dabb-u) || Hbr. dōb || Aram.: Syr. debb-ā || Arab. dubb- || Gz., Tgr., Amh. dabb, etc.

Egyp. (OK) db ‘hyppopotamus’ [*Hippopotamus amphibius*].

Chad. *dab(b)-: W. *dabb-: Hausa dább-à | Ngizim dabb-à ‘wild animal’⁷⁴ | Boghom túp⁷⁵ ‘hyppopotamus’ [*Hippopotamus amphibius*] | Pero dəb-à ‘hyena’ [*Crocuta crocuta*] | Ngamo dəb-ən ‘lion’ [*Panthera leo*] || C. *dVb-: Gudu dōv-ən ‘lion’ [*P. leo*], dív-ā ‘leopard’ [*P. pardus*].

Cush. S. *dab-: Dahalo dabi ‘animal, game’.

Omot. N. *dab-: Gimirra dodba (redupl.) | Ganza dwob ‘lion’ [*Panthera leo*] || S.: Ari de(e)b-i | Hamer dəb-i, dab-i ‘wild animal’.

▲ Cf. Proto-Kuliak *dob- ‘rhinoceros’.

► AADB 282. SED II No. 65.

7.7. *sa/ikʷ- ‘k. of lesser animal’

Sem. *šikVk- (redupl.): Akk. (OB on) šikk-û ‘mongoose’ [*Herpestidae sp.*] || Amh. šøkokk-o ‘rock hyrax’ [*Procavia capensis*].

Chad. C. *sikw-: Pižimbi šekw-a ‘squirrel’ [*Sciuridae sp.*] | Logone swék-a, súwék-a (met.) ‘ground squirrel’ [*Spermophilus sp.*].

Cush. E.: Dullay *šak-t- ‘chameleon’ [*Chamaeleonidae sp.*]: Gawnata šah-to | Gollango šah-to.

Omot. N. *šak-⁷⁶ Wolaita šak-aanča ‘chameleon’ [*Chamaeleonidae sp.*]⁷⁷ | Kafa šakšak-o (redupl.) ‘pipistrello’ (Cerulli 1951: 496) || S. *sik-: Dime sik-u ‘bat’ [*Microchiroptera sp.*].

► AADB 2653. Cf. SED II No. 193.

7.8. *žaʔib- ‘k. of scavenger’

Sem. *diʔb-: Akk. zib-u ‘jackal’ [*Canis aureus*]; ‘vulture’ [*Gyps sp.*] || Hbr. zəʔēb || Aram.: Off. dʔb, dyb | Jud. dēb-ā, zib-ā, zēb-ā | Syr. dēb-ā ‘wolf’ [*C. lupus*] | Mand. zab-a, dib-a || Arab. diʔb, dīb- ‘loup; chacal’ [*C. lupus*, *C. aureus*] || Gz. zəʔb | Tna. zəbʔ-i⁷⁸ | Amh. žəb ‘hyena’ [*Hyaenidae sp.*] || Jib. dib | Soq. dīb ‘wolf’ [*C. lupus*].⁷⁹

Egyp. (Pyr.) zəb ‘jackal’ [*C. aureus*].

⁷⁰ s- may continue *č.

⁷¹ If the theory that *č > Oromo f is correct, perhaps *č > Oromo š before a labial, cf. “s did not become f before a labial” (PEC 33).

⁷² An erroneous determination: martens (including beech-marten [*Martes foina*]) do not inhabit Africa.

⁷³ With insertion of -n-.

⁷⁴ These forms are arabisms, acc. to some authors; however, this form with the meaning ‘wild animal’ is not attested in Class. Arab.

⁷⁵ Regular devoicing.

⁷⁶ Cf. also Kachama šikaale ‘wild cat’.

⁷⁷ Borrowed from or into Dullay.

⁷⁸ Tgr. zəbʔi likely from Tna.

⁷⁹ It is not clear whether the MSA forms are genuine or Arab. lws.

Chad. *žab-: W. *žabžib- (redupl.): Hausa žibžib-tà ‘vulture’ [*Gyps sp.*]⁸⁰ || E. *žabiy- ‘hyena’ [*Crocuta crocuta*]: Migama žábíy-á | Bidiya žébèy-gì.

Omot. *zab-: N. *zab-: Basketo zobba, zoj (-p <*?b-?) | Male zobi ‘lion’ [*Panthera leo*] | Gimirra e-zub-ay ‘cat’ || S. *zab- ‘lion’ [*P. leo*]: Ari zob, žobba | Hamar zob-o | Dime zof.⁸¹

► AADB 284; HSED #2660; SED II No. 72.

8. Birds (a selection)

8.1. *bar- ‘k. of bird (pigeon, partridge)’

Sem. *bar- and *barbur- (redupl.): Hbr. *barbūr* ‘a bird fattened to be eaten by king Solomon’ || Tna. *bar-eto*, *bar-äto*, *bar-ito* ‘turtledove’ [*Streptopelia sp.*], *bar-o* ‘k. of turtledove’ | Amh. *bar-et*, *bar-eto* ‘pigeon, dove’ [*Columba sp.*, *Streptopelia sp.*].

Egyp. (old) *b?* (if <*bVr) ‘kind of bird, black stork, jabiru’ [*Ciconia sp.*].

Berb. *barr-: E. Wlm. *ta-bərr-ut* ‘caille d’Europe’ [*Coturnix sp.*] | Senhadja, Rif *a-barr-an* ‘perdrix mâle’ [*Perdix sp.*] | Qabyle *burur-u* (redupl.) ‘owl’ [*Strigiformes sp.*].

Chad. *bar- and *barbir- (redupl.): W. *?V-(m-)bVr- and *bVrbVr-: Hausa *bì/ùrabiṛ-à* ‘quail’ (Bargery 1934) [*Coturnix sp.*], *bàruu* ‘pigeons’ [*Columba sp.*] | Kirfi *mbìr-ù* ‘dove’ [*Streptopelia sp.*] | Jimbin *a-bur* ‘crested crane’ [*Balearica regulorum*] | Ngizim *bàr-i-* ‘domestic pigeon’ [*Columba livia*] || C. *birbVr-: Bura *biber-wi* ‘k. of bird’ || E. *barr- and *birbir-: W. Dangla *báär-è* (m) ‘perdrix (Francolin)’ [*Perdix sp.*] | E. Dangla *bàrr-é* (f.) ‘perdrix’ [*Perdix sp.*] | Bidiya *bìrbìr-íny* (f.) ‘caille’ [*Coturnix sp.*].

Cush. *bVr-: E.: HEC *bur-: Burji *búr-o* ‘partridge, dove’ [*Perdix sp.*, *Streptopelia sp.*] || S. *m-bar- and *bambar- (redupl.): Iraqw *bambar-é* ‘hoopoe’ [*Upupa sp.*] and *biir-iñ* ‘pytilia bird’ [*Pytilia sp.*] | Dahalo *mbār-e* ‘egret’ [*Egretta/Ardea sp.*].

▲ Cf. Sum. *buru* [bird], wr. *buru₄mušen*, *buru₆mušen* ‘crow; a bird of prey or a vulture’ (PSD), *buru₄*, *bur₄* ‘crow’ (EDS #385), *buru₄mušen* ‘corbeau’ (LSF).

► AADB 2228; SED II No. 61; cf. HSED № 293, EDE II 431-2, Stolbova 2021 #274, 274a (comp. to Eth. Burji, Senhadja, Rif).

8.2. *çirař- ‘k. of bird’⁸²

Sem. *Vṣṣūr- (met.):⁸³ Akk. *iṣṣūr-u* || Ugr. *ʂr* [*Şuşuru*] ‘bird (gen.); domestic fowl, poultry’.⁸⁴

Chad. *çVr-: W. *çiry-: Hausa *çíry-á* ‘parakeet’ | Polchi *cúr-a* ‘hawk’ || E. *sar- and *sarsir- (redupl.): Dangla *sàrsır-ò* ‘bird of prey’ | Bidiya *sár-a* ‘épervier’ [*Accipiter sp.*].

Cush. *çírr- and *çicir- (redupl.) ‘red-billed oxpecker (*Buphagus erythrorhynchus*)’: C *çarrur-: Bilin *çarrūr-ā* ‘Madenhacker’ [*B. erythrorhynchus*] || E.: SA *çarrař-: Saho *çarāř*, *çarrāř* ‘Madenhacker, buphaga erythrorhynchus’ [*B. erythrorhynchus*] | LEC *çírr-: Oromo *či/err-ii* ‘k. of bird,

⁸⁰ Supported by a similar meaning shift in Akk.

⁸¹ Cush. N.: Beja *diib* ‘wolf’ is probably an Arabism. HEC: Sidamo *doob-iččo*, Kambatta *zob-ečču*, Tambaro *zob-eččo* ‘lion’ are likely to be borrowed from S. Omot.

⁸² Egyp. (Pyr.) *dry.t* ‘kite’ compared (if <*çry) in SED II No. 43 is not related due to lack of ʂ whose presence in this root is confirmed by both Sem., Saho and S. Cush. forms.

⁸³ Cf. also Arab. *fuṣṭūr-* ‘any small bird’, Malt. (gh)asfür (<*fṣṭūr-), Hbt. *asferōot* ‘small bird’, Jib. *ʕeṣférōt*, Soq. *fṣṭeroh* ‘bird’ (perhaps a result of contamination between *Vṣṣūr- and *ṣVp(p)Vr- see SED II No. 212).

⁸⁴ Tgr. *čənrař*, *čərnř* (met.) ‘a bird, Buphaga erythrorhynchus’ [*Buphagus erythrorhynchus*] and Tna. *čənrař* ‘a bird a little larger than the thrush’ continue the common form *çirrař- (with dissim. of -rr-), most likely borrowed from Saho *çarrāř* with the same highly specific meaning *Buphagus erythrorhynchus* which can hardly be reconstructed at the PAA or even PCu. level. Hence, attestation of the corresponding term in C. Cush. (Bilin), E. Cush. and even S. Cush. (Dahalo) can only reflect a series of borrowings, probably with Saho as a primary source, eventually related to S. Cush. (W. Rift and Asa) and, metathetically, Sem. (Akk. and Ugr. only) forms.

sucks blood from cow; like hornbill' [B. *erythrorhynchus*] | HEC *çirr-: Sidamo çirr-e 'red-billed oxpecker' [B. *erythrorhynchus*] || S. *çirañ-: Iraqw, Gorowa çirñ-i | Alagwa cirañ-a | Burunge çirañ-a | Asa širañ-a 'bird' (generic term) | Dahalo čičir-a 'tick bird' [B. *erythrorhynchus*], čuár-e 'sp. bird (Roller?)'.⁸⁵

(?) Omot. N.: Wolaita čer-aa 'k. of bird' (very likely a Cushitism).

► AADB 320; cf. HSED #1095 and SED II No. 43.

8.3. *dVr- 'k. of bird'

Sem. *durar- (redupl.) 'k. of bird': Hbr. dərōr 'a kind of bird (swallow, dove?)' || Deir Alla drr 'subst. indicating bird: swallow or dove?' || Arab. durr-at- 'perroquet' (BK 1, 682), 'la perruche à collier couleur de rose' (Dozy 1927: I 428) [*Psittacinae* sp.] || Amh. där(r)-ay 'aquatic, web-footed bird which has black or white plumage' | Masqan dərr-i 'k. of bird'.⁸⁶

Chad. *dawr- (or *daHur-): W. *du/ar- and *dVrdVr- (redupl.): Hausa dúr-wá 'lark-quail (Ortyxelos Meiffrenii)' [Ortyxelos meiffreni] | Dera dárir-ù 'type of swift nightbird' | Seya dər-i 'crown-bird' [*Balearica regulorum*] | Buli dádór 'weaver bird' [*Proceidae* sp.] || C. *(n-)dawr-: Mbara n-dòr-ò 'green pigeon' [*Treron* sp.] | Gude dár-á 'type of bird' || E. *dVHr-: Somrai dùr-é 'hen' | Tumak door 'turtle-dove' [*Streptopelia* sp.], dèr-í⁸⁷ 'oiseau (nom générique)'.

Cush. *diruh-: N. *?an-dirh-: Beja andiirh-o 'fowl' || C. *dir(h)w-: Bilin diruw-a | Qwara, Dembea dirhʷ-ā | Aungi dir-ī, etc. 'cock, hen' || E.: SA *do/irh-: Saho door(o)h-o, diirh-o 'Huhn, Henne' | Afar dorrah-e 'hens' | LEC *du(H)r-: Somali door-o | Jiddu duur-i 'chicken, hen' || S. *di(H)r-: Dahalo déer-e 'woodpecker' [*Picidae* sp.].

Omot. N. *dVr-: Zergula der-i 'chicken', Chara deer-aa 'rooster',⁸⁸ Mao (Hozo) dorñ-a 'bird'.

▲ Cf. Sum. dar [bird], wr. darmušen, dara 'bird, black francolin' (PSD), darmušen 'black franco-lin' [*Francolinus francolinus*] (EDS #437), darmušen 'francolin' (LSF). Blažek (2003) also quotes NS: Kunama doora, dorha 'chicken' (obviously a lw. < Cush.) and, less convincingly, Nubian: Kenuzi darbád 'hen', etc. (probably a look-alike).

► AADB 1665; SED II No. 71. Cf. HSED № 748, Blažek 2003: 235 (the Agaw forms in g- are erroneously mixed with the forms in d- quoted above).

8.4. *gʷay- and *gʷagʷay- (redupl.) 'k. of bird'

Sem. Eth. *gʷagʷ-: (a) Gz. gʷágʷā | Amh. gag-anō 'swan, ibis' [*Cygnus* sp., *Threskiornithinae* sp.]; (b) Gz. gug-ā, gʷḡ-ā 'owl, nighthawk, raven' | Tgr. gʷḡggʷ-a | Amh. gʷägg-a, gʷḡgʷ-ət 'owl' [*Strigiformes* sp.] | Gur.: Gyeto gʷḡgʷ-a, gug-a, etc. 'night bird'.

(?) Egyp. dwy.t (sarc) 'kind of bird' (if <*gwy-t).

Chad. (a) *gʷay-: C. *(?V-)giy-: Higi gýē, Mandara giy-e, etc. | Gude ?i-ggi-ná 'bird', gyagy-a 'hen' || E. *guy: Somrai gui 'partridge' [*Perdix* sp.]; (b) *(n-)gag/k- (redupl.) 'crow' [*Corvus* sp.]: W. *(n-)gag/k-: Gwandara ḥganjk-ā | Angas ngak (-k < *-g) | Pa'a gáag-a || C. *n-gag/k-: Buduma n-gag-é || E. *gag -: Bidiya gaag-a | Mubi gak (dissim.?) | Mokilko gaag-u.

Cush. E. *gug/k-: SA *gugg- (redupl.): Saho, Afar gugg-a 'hornbill' [B. *erythrorhynchus*] | LEC *gug-: Oromo gug-e 'dove' [*Streptopelia* sp.] | HEC: *gug-Vn-: Darasa guug-en-žo, pl. guug-

⁸⁵ Both words probably borrowed, since *l is expected to be preserved in Dahalo.

⁸⁶ Cf. Gz. dorho, doroho 'chicken', Tgr. derho 'chicken', Tna. däरho 'pollo, gallina', Amh. doro 'chicken', Gog. Sod. žäřä 'hen, chicken' borrowed from Cush. The non-etymological "extra" -h is equally unexplainable in both Eth. and Cush. Cf. also Syr. dardā 'vultur' [*Gyps* sp.]

⁸⁷ From *dVHr-, acc. to Caprile 1975: 123.

⁸⁸ Both may be Cushitic lws.

enna ‘dove’ [*Streptopelia sp.*]⁸⁹ || Yaaku goigui ‘bee-eater’ [*Meropidae sp.*] || S. *n-gVk- (dissim.): Dahalo *ŋgōk-o* ‘whydah bird’ [*Vidua macroura*].

▲ Cf. Kuliak *gwak- ‘bird’. Cf. also Sum. *uga* [raven], wr. *uga^{mušen}*, *uga* (PSD), *uga^{mušen}* ‘crow, raven, bird of pray’ (EDS #2693). Note special affinity between some Chad. and Dahalo forms.

► AADB 324, 2098.

8.5. *g^wam- ‘k. of bird’

Sem. *g^wam- and *g^wamg^wam- (redupl.): Akk. (SB) *gam gamm-u* ‘a bird’ || Gz. *gumgum-ā* ‘pelican’ [*Pelecanus sp.*] | Tna. *g^wag^wamm-a* ‘bird which chirps when in numbers’, *gum-a* ‘large vulture the neck of which is featherless’ [*Gyps africanus*] | Tgr. *gumgum-a* ‘esp. d’oiseau’.

Chad. *gam and *gamgim- (redupl.): W. *gam-: Polchi *gam* ‘eagle’ [*Aquila sp.*] | Sayanchi *gâm* ‘hawk’ [*Accipiter sp.*] || C.: Zulgo *gúwùm*, Gisiga *gigim* ‘owl’; E. *gumgi/um- ‘owl’: W. Dangla, Migama *gúgùm-ò* | Bidiya *gúugum-a* | Mokilko *gùugím-à*, Ubi *guugùm*, Mawa *gugum* (cf. Stolbova 2011 #630).

Cush. N. *(*a*-)gam-: Beja *agam-a* ‘seagull’ [*Larus sp.*] || E.: SA *gum-: Saho *gúm-ā* ‘der Adler’ [*Aquila sp.*] | Afar *gum-a* ‘vultures; white-backed vultures’ [*Gyps sp.*].

Omot. N.: Gimirra *gyam* ‘chicken’.

► AADB 2628; cf. SED II No. 78.

8.6. *(*aa*-)gawir- ‘k. of bird’

Sem. *(*aa*-)gawir-: Akk. (OB) *igir-û* ‘heron’ [*Ardea sp.*] || Hbr. *ʕāgūr* ‘short-footed thrush or swift or wryneck (?)’ || D.-Alla *ʕgr* ‘subst. indicating certain kind of bird’ || Arab *ʒawrak*⁹⁰ ‘Struthiocamelus mas’ (Freytag 1833) [*Struthio camelus*].

Egypt. (late) *gr-y* ‘poultry’.

Chad. *gawir- and *girw- (met.): W. *gir-: Zar *gèr-i* | Seya *gèr-i* ‘hen’ || C. *girw- and *gagwir- (redupl.): Matakam *gógwṛ* ‘cock’ | Munjuk *gagray* ‘guinea-fowl’ [*Numida meleagris*], *yugúr-iy* ‘hen’ | Mandara, Padukwo *žírrw-e* | Uzam *žirw-e* ‘ostrich’ [*Struthio camelus*] || E. *gawr-: Kera *gúgur-i* (redupl.) | Somrai *gàray* ‘hen’ and *gwár-a* ‘heron’ [*Ardea sp.*] | Dangla *gár-è* ‘duck’ [*Anas sp.*].

Cush. E. *gawr-ay-: SA: Saho *gàry-a*, *gàraay* | Afar *goroyy-a* | LEC: Somali *goray* | Boni *korii*, *koree* ‘ostrich’ [*Struthio camelus*] | Oromo *gogorr-ii* (redupl.) ‘guinea fowl’ [*Numida meleagris*]⁹¹ || S.: Dahalo *ngára* ‘crested crane’ [*Balearica regulorum*].

▲ Cf. Sum. *igira* [heron], wr. *igira₂^{mušen}* (PSD), *igira*, *igirû* ‘stork’ (EDS 1233).

► AADB 1931; cf. HSED #1053; SED II No. 29.

8.7a. *yuraʔ - ‘crow’

Sem. *ya(r)yur- (redupl.): Akk. (OB) *ħaħħur-u* ‘a bird of the raven/crow family’.

Berb. S. *-yru-t: Ayr, E.Wlm. *a-yrut* ‘corbeau’ [*Corvus corax*] (otherwise <*k^war- ‘crow, raven’ 8.13).

Chad. *yar- ‘crow’:⁹² W. *yaHar-: Sura *gɔɔr-ɔɔ* ‘Krähe’ | Zul *yàr-átí* ‘crow’ || C.: Glavda *yáayħár-a* (redupl.) ‘crow’ [*Corvus sp.*] | Sukun *yram-ak* ‘pied crow’ [*Corvus albus*] || E. *?a-gr- (met.): Ndam *?agr-a* ‘crow’ [*Corvus sp.*].

Cush. *ħuraʔ- ‘crow’ [*Corvus sp.*]: C.: Qemant *ħoray*; S. *ħuraʔ-: Iraqw *ħwaʔari* (met.) | Burunge *ħwarar-iya* (redupl.) | Alagwa *ħohoraʔi* (redupl.) | Ma'a *i-h/hureʔ-a* (met.)

► AADB 2632; SED II No. 89; CED #300.

⁸⁹ Cf. Dullay *ʔāg-it-: Warazi, Gobeze, Harso *aag-iče*, Tsamay *ʔaag'-* ‘bird (generic)’.

⁹⁰ Non-etymological -k is probably due to contamination with Arab. *yirmīk-* ‘grue’ (see in 8.7.3. *yurayk-an-).

⁹¹ Omot. N.: Koyra *googgóra* ‘partridge, quail’ < Oromo.

⁹² Our *y corresponds to ħ in Stolbova’s notation.

8.7b. **yurayb-* ‘crow, raven’

Sem. *(ʔa-)yārib- and **yurab-*: Akk. ārib-u (*ērib-u, hēreb-u*) ‘crow, raven’ [*Corvus sp.*] || Ebla *ha-ri-bu/i, [h]a-ri-bù-um, g[a-r]í-bù /yārib-um/* ‘corvo’ [*Corvus sp.*] || Hbr. ſōrēb ‘raven’ [*C. corax*] || Aram.: Syr. ſūrəb-ā ‘corvus’ [*C. corax*] | Mand. ſurb-a ‘crow’ [*Corvus sp.*] | Arab. *yurāb-* ‘corbeau (tout noir); ‘corneille’ [*Corvus sp.*] || Mhr. ya-yarāyb ‘raven’ [*C. corax*] | Jib. ʔa-yəréb ‘raven, crow’ [*Corvus sp.*] | Soq. ?á-ſreb ‘crow’ [*C. corax*], ‘Egyptian vulture’ [*Neophron percnopterus*].

(?) Egyp. (Lit MK) ՚bw ‘kind of bird?’ (if < *šbw met. < *rb).

Chad. E. **yurb-*: Jegu *gurb-ak* ‘crow’ [*Corvus sp.*]⁹³

Cush. E. **yurrub-* (redupl.) ‘crow’ [*Corvus sp.*]: Dullay **kurrub-*: Gawwata *kurruup-akko* | Harso *kurruup-ičče* | Galila *kurruup-itte*.⁹⁴

► AADB 2632. Cf. SED II No. 89; HSED №1015.

8.7c. **yurayk-an-* ‘k. of bird (crane, raven)’

Sem. **yurnayk-* (met.): Akk. (SB) *urnīk-u, hurnīk-u* ‘Kranich’ || Arab. *yirnīk-, yurnūk-, yirnawķ-, yurnayk-* ‘grue’.

Chad. **n-gawrak-* (met.)⁹⁵ ‘crested crane (*Balearica regulorum*): W. *(n-)gaw(m)rak-: Hausa *gaurak-a, gamrāk-a, garmāk-a* ‘(crested) crane’ [*Balearica regulorum*] | Karekare *ngùràak-àa* ‘crowned crane’ [*B. regulorum*]⁹⁶ || E. **n-garak-*: E. Dangla *ŋārk-o* | Migama, Bidiya *ŋarāk* ‘(crested) crane’ [*B. regulorum*].

Cush. E. **ħara(y)k-*: HEC **ħaraken-t-*: Darasa *ħaraken-sa* (pl.) | Sidamo *ħarakess-a* (assim. of *-n-) ‘raven’ [*Corvus corax*] || Yaaku *ħaryak-a* ‘crow’ [*Corvus sp.*].

(?) Omot. S.: Ari *ḳuraak* (met.?) ‘crow’⁹⁷ [*Corvus sp.*].

► AADB 2633; SED II № 91.

8.8. **kʷar-* and *kʷarkay-* ‘k. of bird’

Sem. **kʷarkay-* (redupl.): Akk. *kurkû* ‘goose’ [*Anser sp.*] || Aram.: Syr. *kurkay-ā* ‘grus’ [*Grus sp.*], Jud. *kurkay-ā*, Mand. *kurki-a* ‘crane’ [*Grus sp.*] || Arab. *kurkiyy-* ‘grue’ [*Grus sp.*] || Gz. *kʷarāki, korki* ‘crane’ [*Grus sp.*]⁹⁸

(?) Egyp. (Pyr.) ՚ (if < **kVr-*) ‘junger Vogel (Schwalben, Geier); junges Tier’.

Berb. *-*kVr-t*⁹⁹: Ayr *a-krə-t* | E. Wlm. *a-kər-t* ‘nestling, young of a bird’ | Ahaggar *e-ker-t* ‘young of ostrich’.

Chad. **kʷar-*, **kʷarkay* and *kʷarkʷir-* (redupl.): W. **kʷar-*: Tangale *kʷar-te, kʷatr-e* (met.) ‘guinea-fowl’ [*Numida meleagris*] | Polchi *koř-a* | Buli *kúr* | Tala *kwor, kor* ‘hen’ || C. **kur-*, **kʷarkay-* and **kʷVrkʷVr-* (redupl.): Mbara *kūrakáy* | Gude *kúrökú-tà* | Lame *kòrök-ú* ‘dove’ [*Streptopelia sp.*] | Mofu *kwerekwer-e* | Munjuk *kor-o* ‘duck’ [*Anas sp.*] | Sukur *ta-kur* ‘hen’ and ‘dove’

⁹³ Acc. to CED #300, not an Arabism as presumed in SED II No. 89, but a genuine Chadic word.

⁹⁴ Cf. also HEC-: Burji *gurrub-a* ‘crow’ which may be a Dullay lw.: in Burji *γ>h is rather expected.

⁹⁵ Acc. to CED: 41, Sem. *γ (conveyed *ibid.* by *g̥) corresponds to what Stolbova reconstructs as P. Chad. *f̥ (a symbol accepted in Chadic but not in AA studies to convey *γ) yielding *g̥- in W. and E. Chad. As for the velar in the final position, all Chadic forms except Hausa may reflect *-k̥ corresponding to *-k̥ in the other AA branches; Hausa, however, points to *-k̥, not *-k̥. One wonders if the Hausa term could have been borrowed from another W. Chad. language and not *vice versa*; another possible explanation is the loss of “emphatization” in the position of the fourth radical.

⁹⁶ Jimi *gaurak-a*, Ngizim *gəvārak, vārak* ‘crown bird’ [*B. regulorum*] are probably loans from Hausa.

⁹⁷ Reflexes of the extremely infrequent voiced uvular γ in Omotic have not been reliably established.

⁹⁸ Claimed by some authors to be a series of borrowings: Aram. < Akk. < Sum.; Gz. < Arab. Neither is convincing in view of the AA parallels.

⁹⁹ Cf. Ayr *ta-kärăw* ‘k. of bird’.

[*Streptopelia sp.*] || E. *(?a-)ku(r))kir- (redupl.): Kera akórkórò | Migama kókkór ‘duck’ [*Anas sp.*], kúkkírá ‘cock’ | Dangla kókíra | Jegu kókóré | Mubi kòkóréy ‘hen’.

Cush. *kar-: N. *ka(r)karr-: Beja kaakarr-et ‘hen’ || S. *karaʔ-: Qwadza kalaʔ-eto ‘stork’ [*Ciconia sp.*].

Omot. N. *kur- and kurki-t- (redupl.) ‘partridge, quail’ [*Cotornix sp.*, *Perdix sp.*]: Gamo kúr-aččo | Dorze kor-aččo | Zergula kerk-ečče | Male karek-aččo || S. *kurki-t-: Hamar korikiš-a.

► Cf. Sum. *kurgi* [goose], wr. *kur-gi^{mušen}*, *kurku₂*, etc. (PSD), *kur-gi^{mušen}* ‘crane’ (EDS #1478).

► AADB 377; cf. SED II No. 117; HSED 1505; Stolbova 2011 #277.

8.9. *kʷay- and *kʷakʷay- ‘k. of crow or bird of prey’

Sem. (a) *(?a-)kaw: Akk. (SB; LL) *akkû* || Aram. Jud. *kaw-tā* ‘owl’ [*Strigiformes sp.*] || Tgr. *kuw-a* ‘raven’ [*C. corax*]; (b) *kʷakʷay- (redupl.): Gz. *kʷākʷ-ā* | Tgr. *käkay* ‘corbeau à capuchon blanc’ [*Corvus albicollis*] | Tna. *kʷakʷ-ə* ‘crow, raven’ [*Corvus sp.*].

Chad. *kawiy-: W.: Bolewa *kāk-i* (redupl.) ‘crow’ [*Corvus sp.*] || C. *kVwiy-: Mandara *kuy-è* ‘kite’ | Malgwa *kúúy-e* ‘falcon’ [*Falco sp.*] | Zulgo *kéwiy-è* ‘eagle’ [*Aquila sp.*] | Zime *kìw* ‘falcon, kite, eagle’ || E.: Mokillo *kāw-á* ‘white dove’ [*Columba livia domestica*]¹⁰⁰.

Cush. *kʷawkʷay- (redupl.): N. *kwikay-: Beja *kwiikway*, *kiik(?)ay* ‘crow; raven’ [*Corvus sp.*]¹⁰¹ || E.: SA *kakaw-: Saho, Afar *kaakoo* ‘raven’ [*C. corax*].

Omot. N. *?an-ka(w)- ‘vulture’ [*Gyps sp.*]: Basketo áŋká | Malo aŋkó.

► AADB 2641. Cf. SED II No. 123, Blažek 2003: 262.

8.10. *kʷaʔay- and *kʷakʷay- ‘k. of gallinaceous bird’¹⁰²

Sem. *kakay- (redupl.): Syr. *kākāy-ətā* (*kokantō?*) ‘gallina’.

Berb. *-ka(H)y-aw ‘cock’: Ghat *i-kai* | Ahaggar *e-kahi*, pl. *i-keh-an* | Ayr, E. Wlm. *ta-kayy-a* | Semlal *a-kiy-aw*, pl. *i-kiyaw-an* ‘poussin’.

Chad. (a) *kʷay-: W. *kʷay-: Gwandara *kwee* | Sura *kwéé* | Angas *kì* ‘hen’ | Guruntum *kʷày-a* ‘cock’ || C. *kway: Buduma *kúy-ē* ‘partridge’ [*Perdix sp.*]; (b) *kʷaykʷ- (redupl.): W. *kʷaykʷ-: Dera *kíyók* ‘goose’ | Fyer *kùkw-è* ‘hen’ || C. *kwak-: Gulfei *kwaku* ‘hen’.¹⁰³

Cush. *kaway- and *kawkaw- (redupl.): N. *kaw: Beja *kaw* ‘Perdix Erkelii’ [*Pternistis erckelii*] || C. *kaway-: Bilin *koy-a* | Qemant *kawiy-ā* ‘Frankolinus Erkelii’ [*Pternistis erckelii*] || E. *kawkaw-: Yaaku *kɔkɔ* ‘fowl’.

Omot. *kaway- and *kaykay- (redupl.): N. *(?a-)kayw: Male *kai* ‘bird’ | Yamma *akō* ‘chicken’ | Mao *wake* (met.) ‘fowl, chick’ | Chara *aka* | Kafa *akkō* | Mocha *akke* || S. *kaykay-: Dime *kéekí* ‘partridge, quail’ [*Coturnix sp.*, *Perdix sp.*].

► AADB 325. Cf. SED II No. 123; Blažek 2003: 261.

8.11. *kʷa(?r)- ‘crow, raven’

Sem.: Eth. *kʷar- and *kʷakʷar- (redupl.) ‘crow, raven’ [*Corvus sp.*]: Gz. *kāker* ‘crow’ | Amh. *kʷəra* (*kura*) ‘crow, raven’ | Selti *küre* | Wolaita *kuri* | Gur. *kʷəra ‘crow’.

Berb. S. *-kru-t-: Ayr, E. Wlm. *a-yru-t* ‘corbeau’.

Chad. *kʷar-* and *kukar-* (redupl.): C.: Podoko *kakár-a* | Cuvok *kʷür-ðw* ‘crow’ || E.: E. Dangla *kòr-é* ‘esp. de corbeau noir’ | Bidiya *kūraaq-à* (met.; -g <*k by dissim.?) ‘black crow’ [*Corvus sp.*] (cf. also *kʷVr- ‘hawk’, *kVr(V)r- ‘owl’ (Stolbova 2011 #406, 406b)).

¹⁰⁰ Cf. also Fali-Jilbu, Gulfei *yukey* ‘hen’.

¹⁰¹ Cf. Beja *éke* ‘Geier’ [*Gyps sp.*], *eeki* ‘white vulture, hawk’ [*Gyps sp.*, *Accipiter sp.*].

¹⁰² It is hard to determine whether the present root is homonymous to 8.9. *kʷay- and *kʷakʷay- ‘k. of crow or bird of prey’ or if both eventually originate from a common protoform.

¹⁰³ Cf. also Chad. *kway(kway)-: W.: Tangale *kwíyú* ‘dove’, Seya *kwok-kwok* ‘weaver-bird’; also Kwang *kóyō* ‘bird’.

Cush. C. **kur-* and **kwakur-* (redupl.): Bilin *kūqūr-ā* ‘der Rabe’¹⁰⁴ | Khamta *qur-ā-* | Qwara *qur-ā* | Qemant *hor-ay* ‘raven’ [*Corvus corax*] || Aungi *kur-a* ‘crow’ [*Corvus sp.*] || E.: LEC **kurr-:* Oromo *kurr-uu* | Bayso *kur-a* | HEC **kur?(-an)-:* Hadiya *koraan-ta* | Alaba *kur-a* | Burji *koran-čo*, etc. ‘crow’ [*Corvus sp.*].

Omot. **kur-* and **kuraak-* (redupl.): N.: Wolaita *kuur-uwa* | Gamu, Zaysse *kur-o* | Dače *kor-aa-še* | Bworo *a-koko-a* | Kafa *ku-re-čo* | Yemsa *kur-a* ‘crow’¹⁰⁵ || S.: Ari *kuraak* ‘crow’ [*Corvus sp.*].

► AADB 1668; SED II No. 134.

9. Reptiles (selection)

9.1. **?ačhayl-* ‘(big) reptile’

Sem. **?aḥaly-* (met.) ‘a mythical reptile, dragon’: Syr. *?ātaly-ā* ‘draco; stella, quae solem tegens eclipsim efficit’ | Mand. *tali-a* ‘fictive dragon causing eclipse’ || Tgr. *?ashal-ät* ‘dragon’ | Tna. *?asäl-ät, ?ashal-ät* ‘animale favoloso, di smisurata grandezza e della specie del coccodrilla’.

Berb. **Hašayl-*: Ghat *ašil* | Ahaggar *âšsel* ‘serpent’ | Ayr *ašsel* | E. Wlm. *ašsol* ‘coulevre, gros serpent’ | Mzab *t-iššel-t* ‘vipère’.

(?) Cush. S.: Dahalo *tālala* (met.) ‘puff-adder’ [*Bitis arietans*].¹⁰⁶

Omot. **?/haylaš-* (met.) ‘crocodile’ [*Crocodylus sp.*]: N. **?aylaš-:* Wolane *aylaaš-uwa* | Zala *aylaš-uwa* | Dawro *allaš-o* || S. **haylaš-:* Ari *hayleš-a*.

► AADB 2606. Cf. SED II No. 20.

9.2. **bač-* ‘snake, reptile’

Sem. **bat-am/n-:* Akk. *bašm-u* ‘a horned serpent’ [*Cerastes cerastes*]; the constellation Hydra’ || Ebla *ba-ša-nu-um* ‘k. of snake’ || Ugr. *btn, btn-t* ‘serpent, dragon’ || Arab. *baṭan-* ‘coulèvre, serpent’, *buṭn-* ‘genre de reptile’.

(?) Berb. **buč*: Shenwa *buš* ‘ramper (serpent, escargots, insects)’.

Cush. E.: LEC *(*a*-)*bVč-:* Somali *abes-o* ‘kind of serpent’ | Oromo *bof-a* ‘snake’.

Omot. N. **biṭas-* (met. <*?i-bas-?*): Dizi (Sheko) *bias-u* ‘crocodile’ [*Crocodylus sp.*].

► AADB 2625, SED II No. 63.

9.3. **bat-* ‘k. of snake or worm’

Sem. **batt-ir-* and **buttay-m-:* Akk. (SB) *mu-battir-u* ‘ein Wurm (?)’ || Gur.: Muher *buttayam-at* | Eža Chaha *butyam-at* | Ennemor. *butyäm-ata* | Gyeto *butyäm-ata* ‘viper’.

(?) Egyp. *btn.w*, snake determinative.

Chad. **bat-ar-:* C. **bat-ar-:* Gudur *batar-a* and *botor-o* ‘vipère cornue’ [*Cerastes cerastes*] | Gisiga *botor-o* ‘Art Brillenschlange’ [*Elapidae sp.*] | Daba *m-burut-u* (met.) ‘ver de Guinée, dracunculose’ || E. **bVt-Vr-:* W. Dangla *bɔttɔr* ‘petit vers parasite du mil (sur épis)’ | Mokilko *bétér-é* ‘Würmer (Eingeweide)’.

Cush. E.: LEC **büt-* ‘puff-adder’ [*Bitis arietans*]: Oromo *büt-ī* | Dasenech *büt-i?* | Konso *pūt-ota* | Arbore *büt-é*.¹⁰⁷

¹⁰⁴ *kūqū* is translated as ‘schreien, gakern’.

¹⁰⁵ Acc. to Bender’s phonological correspondences, *k-* in Kafa and Yemsa can continue AA **k-*.

¹⁰⁶ *t* in Dahalo is usually considered to continue only AA **t* – just as *d* is considered to continue AA **d*. There are a couple of cases, however, of Dahalo *d* likely corresponding to Sem. *d* < AA **ž* (cf. fns. 19 and 109). Interestingly, G. Takács, the foremost authority on AA consonantal reflexes in S. Cush., leaves empty cells for Dahalo reflexes of AA **č* and **ž* in his table of correspondences between PAA and S. Cush. (Takács 2011: 116).

¹⁰⁷ HEC: Burji *büt-ē* ‘puff-adder’ [*Bitis arietans*] and Golango *pūt-e* ‘Speischlange (*Naia nigricollis*)’ [*Naja nigricollis*] are loanwords from Oromo.

Omot. S. **bVt*-: Dime *bət-á* ‘lizard’.

► AADB 2626; cf. SED II No. 63.

9.4. **dawi?*- ‘k. of snake or worm’

Sem.: **dawd*- (redupl.): Arab *dūd*-, *duwwād* ‘ver, vermine’.

Egyp. *ddy* ‘Schlangenname’.

(?) Berb.: *-*diwdiw* (redupl.): Izayan *a-diudi* ‘k. of worm’.¹⁰⁸

Chad. **da?iw*- and **dawday*- (redupl.): W. **da?Vw*- and **dawday*-: Hausa *da* ‘snake (the lightish-colored snake called dako)’ (<**da?*-), *daudai* ‘k. of snake’ | Angas *dū* ‘lizard’ | Bolewa *did* ‘snake’ | C. **dVdVw/y*-: Mofu *dédew* | Mada *dèdyè-kw* ‘a very poisonous snake’.

(?) Cush. N. **daw?*-: Beja *do?-o* ‘maggot, worm, caterpillar’.

Omot. **dawi?*- ‘python’ [*Pythonidae sp.*]: N. **dawi?*-: Malo *dawe* | Oyda *dawwe* | Basketo *dəwi* | Chara *do?-a* | Ginirra (Bencho) *dyah* | Dizi (Sheko) *däw-á* || S. **da(H)w*-: Dime *dááu*.

► AADB 253, 368.

9.5. **har*- ‘crocodile’

Chad. **har-um*- ‘crocodile’ [*Crocodylus sp.*]: W. **haram*-: Diri *hur-in* | Sha *hàr-àm* ‘some water monster (crocodile, hippo)’ | Bokkos *haràm* | Daffo-Butura *hàràm* | Kulere *hárâj*, etc. || C. **hurum*-: Gisiga *hurom* | Mbara *húrúm* | Masa *húrúm-nā*, etc. || E. *(H)*urm*-: Lele *úrm-ō* | Kabalai *ɔrrm-ə*.

Cush. E.: Dullay: Gollango *háar-o* ‘crocodile’ [*Crocodylus sp.*] || S. **harar*- (redupl.) ‘mythological giant snake’: Iraqw *hárár-îo* | Gorowa *haraari-yoda*.¹⁰⁹

► AADB 4072; CED #332 (comp. to Gollango and Ongota).¹¹⁰

9.6. **-has*- ‘k. of big snake or crocodile’

Sem. **na-ħaš*: Ugr. *nħš* ‘serpent, snake’ || Hbr. *nāħāš* ‘snake’ (in one context interpreted as *Crocodilus vulgaris* [*Crocodylus vulgaris*]).¹¹¹

(?) Egyp. (OK) *msh* (< **mV-has*- with met.?) ‘crocodile’ [*C. vulgaris*].

Chad. W. **ni-(H)yis*-: Sayanchi *nyíč-i* ‘snake’ | Bokkos *nyes* | Daffo-Butura *nis* ‘python’ [*Pythonidae sp.*].

Cush. E.: LEC **ya-ħas*- ‘crocodile’ [*Crocodylus sp.*]: Somali *yehaas* | Rendille *yah(a)s-i* | Boni *žaháas* (ž- <**y*-?) | HEC **hamas*- (< **mV-has* with met.) ‘snake’: Sidamo *hamas-o* | Hadiya *hamas-iččo* | Burji *hamas-i*.

▲ The multiple prefixes and metatheses may be due to tabooing.

► AADB 279, 336. Cf. Stolbova 2005 #502 and SED II: p. 211.

9.7. **kVr*- ‘k. of big snake or crocodile’

(?) Egyp. (Pyr.) *iʃkr.w* ‘kind of snake’ (a variant root?).

Chad. **kVr*-:¹¹² W. **kVr*-: Bolewa *kúre-di* ‘snake’ | Dera *kőr-ì* ‘black cobra’ [*Naja melanoleuca*] | Tangale *kuro-t* | Pero *kùre-t* | Guruntum *kàrà-udi* ‘viper’ | Kulere *kígyér* (redupl.) ‘snake’ ||

¹⁰⁸ Cf. also *ti-dda*, *ti-ddi-t* ‘sangsue’ strangely quoted in Naït-Zerrad 1999: 274 without naming the language.

¹⁰⁹ Acc. to Kiessling, Mous, 2003: 132, “probably of Datoga origin”, which is less likely in view of the Chad. cognates.

¹¹⁰ Ongota *haar-o* ‘crocodile’ compared *ibid.*, if recorded correctly, does not fit here because of *ħ*.

¹¹¹ Cf. Arab. *ħanaš*- ‘reptile, snake’ with irregular -š instead of -s and Akk. *šahān*, a snake-god acc. to some authors.

¹¹² In all Chadic languages represented here, *k* may continue both AA **k* and **k̥*.

C. *ku/ir-: Hwona *kir-aŋa* | Gude *kir-ma* | Laamang *kár-ámá* | Mandara *kírr-we* | Glavda *kír-əwà* | Musgu *kúr-um* ‘crocodile’ [*Crocodylus sp.*] | Banana *kur-iyà* ‘snake’.¹¹³

Omot. S. *kar- ‘python’ [*Pythonidae sp.*]: Ari *ḳari* | Hamar *ḳáári*.

► AADB 266.

9.8. *sib- ‘k. of snake or worm’

Sem. *šib- and *šibšib- (redupl.): Akk. (MB) *šibb-u* ‘a snake’ || Gur.: Gyeto *sib-a* | Chaha, Eža *šib-a* | Ennemor *šib-a* ‘k. of worm’ || Harsusi *šebešeb-ēt* ‘small red worm, centipede’ | Mhr. *šabšib*, Jib. *šebešeb* ‘red water worm’ [*Glycera sp.*].

Chad. E.: Lele *súb-ó* ‘worm’.

Cush. *sib-: C. *sib-ar- (with fossilized -r suffix) ‘snake’: Bilin *sabar-ā* | Khamir *sibr-ā* || E.: LEC: *si(m)b-: Oromo *siib-a* ‘worm’ | Somali *sumbay* ‘tapeworm’ [*Eucestoda sp.*].

Omot. N. *šibb- ‘crocodile’ [*Crocodylus sp.*] (with a semantic shift): Koyra *šepp̪-o* | Ganjule *šeþ-ō* | Zaisse *šeþo*, *šeþþ-ō* | Zergula *šeþ-ō*.

► AADB 256; cf. SED II No. 200, HSed № 2227.

9.9. *sVf- ‘k. of snake’

Sem. *šVp-: Hbr. *šəp̪ip̪-ōn* ‘horned viper’ [*Cerastes cerastes*] || Syr. *šappāp-ā* ‘serpens’ || Arab. *siff-*, *suff-* ‘serpent; espèce de serpent tacheté de blanc et de noir’ || Tgr. *səf* ‘millepede’ [*Diplopoda sp.*] | Tna. *wäsf-at* ‘intestinal worm, hook-worm’ [*Ancylostoma sp.*] (K 1748).

Egyp. (RT) *sfy* ‘Name einer Schlange’.

Berb.: Zenaga *te-sfuf-ah* ‘a snake’.

Chad. E.: Kwang *sép-í* ‘snake’.

Omot. N. *šip-: Kafa *šeф-ittoo* ‘sorta di lucertola’ | Bworo *šíppir-a*, *šípr-a*¹¹⁴ ‘worm’.

► AADB 254; SED II No. 207.

10. Water reptiles and amphibia (selection)

10.1. *kʷa₁- and *kʷa₂kʷa₁- (redupl.) ‘frog’

Sem. *kʷa₁kʷa₁- (redupl.) ‘frog’: Eža Msq. *kʷäč-ä* | Cha. Enm. Gyt. *kʷänč-ä* | End. *kōnč-ä* (with a secondary -n) || Mhr. *ḳák-āt* | Hbt. *ḳakʔō-ot* | E. Jib. *ḳáḳ-āt*.¹¹⁵

Chad. *kawkaw (redupl.): W.: Ngizim *kóokó* ‘small frog’ || C.: Buduma *kōko* ‘frog’.

Cush. E. *kaw₁- ‘frog’: Dullay *ko₁-: Tsamay *mu-ko₁-te* || Yaaku *ḳɔk-ɔntε* (redupl.).

Omot. N. *?uk₁- (met.?) and *kʷak₁- (redupl.) ‘frog’: Male ?uk₁-ané | Mao (Hozo) *kwak-a* | (Sezo) *kwak-i*.

► AADB 3963, SED II No. 128.

10.2. *camb- ‘some water creature’

Sem. *ṣabb-: Hbr. *ṣāb* ‘thorn-tailed lizard’ [*Uromastyx sp.*] || Syr. *ṣabb-ā* ‘garum, lacerta caudiverbera’ [*Lacerta caudiverbera*]¹¹⁶ || Arab. *dabb-* ‘lézard, part. lézard d’Afrique’¹¹⁷ || Mhr. *zəbb-īt* | Hrs. *zebb-ēt* | Jib. *ȝɔb* (pl. *ȝet*) ‘(female) monitor lizard’ [*Varanus sp.*].

Berb. S. *zVb- ‘k. of small insect living in water’: Ayr, E. Wlm. *ta-ȝəbb-e*.

Chad. W. *cumb-: Hausa *cùmb-ē* ‘frog’.

¹¹³ Cf. also Munjuk *kiyir* ‘ground worm’ and E.: Sokoro *kōre* ‘guinea worm’.

¹¹⁴ With fossilized suffix -r.

¹¹⁵ Cf. Jib. *ṣakṣákət* ‘frog’, with metathesis.

¹¹⁶ Aram. Jud. *ṣabbā*, *ṣābā* ‘thorn-tailed lizard’ [*Uromastyx sp.*], likely < Hbr. since *ṣ is expected to yield ṣ-.

¹¹⁷ Cf. also Arab. *diʔb-* ‘animal living in water’.

Cush. S. **čamb-V*ʕ-: Iraqw *čamb-ebé* ‘small insect drifting on top of water, tadpole’ | Alagwa *čemb-eṣu* | Burunge *čamb-eṣu* ‘frog’.

Omot. **čV(m)b*-: Gimirra (Bencho) *čobm* ‘adder’ [Vipera berus]¹¹⁸ | Yemsa *čop̪-a*, *šop̪-ā* ‘fish’ | Kafa *ṭibb-ō* ‘sorta di verme che vive nell’acqua’.

► AADB 334; cf. SED II No. 221; Blažek 2008 #173; HSED #581; Dolgopolkiy 2008 #470.

10.3. **dindal*- ‘small waer creature’

Sem. **da(n)dil*-: Akk. (SB) *dālil*- ‘a small animal, probably a frog’ || Hbr. pB *nādāl* (met.) ‘polype, centipede’ || Aram.: Jud. *naddal*- id. (met.) | Syr. *dandāl-ā* ‘scolopendra vel millepeda’ || Jib. *dolol-ēt* ‘kind of slow-moving snake’.¹¹⁹

Chad. E. **didaln*- (met.): Dangla *diđaln-yà* ‘limace’.

Cush. E.: HEC **dindal*-: Darasa *daddal-ʔe* | Kambatta *diddil-ičču* | Sidamo *dandall-e* ‘lizard’.

► AADB 3916. Cf. SED II No. 68.

10.4. **kʷar*- ‘frog’

Sem. **kʷa/ir*- and **kʷa(r)kʷir*- (redupl.) ‘frog’ (with different affixes): Syr. *yakrūr*- and *ṣakrūk*- | Jud. *ʔakrok-tā* || Arab. *kirr*-, *kurr*-, *karr-at*- || Gz. *kāker*, *kʷarnanaṣāt* | Tgr. *korəs*, *ʔankorəs* | Tna. *kʷərəs*, *ənkoroṣ*¹²⁰ | Amh. *kərnən-ot* | Har. *ankurāraḥ-ti*.

Egyp. (NE) *krr* | Copt. **karār-aw* (redupl.) ‘frog’ (Vycichl 1983: 86-7).

Berb. **karw* and **karku/ir* (redupl.) ‘toad, frog’: Rif *a-karkur* | Iznassen *karkriw* ‘toad’ | Sen-haja *a-karkur* | Ahaggar *a-yeru*, pl. *i-yer-ān* ‘frog’.

Chad. **kir-an*- and **ka(r)kir-an* ‘frog’: W.: Ngizim *kòrìinàkáu* || C. **kir-in*- ‘frog’: Gava *kirè* | Mofu *kakəraŋ* (redupl.) | Daba *kírriŋ* || E. **kVrin*-: Birgit *kírén-ì* | Sokoro *kóriŋ-ē*.

Omot. N. **?u-kar*: Zaysse *ʔoołkar-o* | Zergula *ʔookēr-u* ‘frog’.

► SED II No. 137; AADB 270.

11. Fish

11.1. **?irw*- ‘fish; spawn’

Sem. **?irw*-: Akk. (SB) *e/urû-t-u* ‘(fish) spawn’.

Egyp. (Med.) *iṣr.t* ‘part of fish’ (if < **?ir-t*).

Chad. **?iwr*- ‘fish’: W. **?uri*-: Hausa *ùùrii* || C. **wuraH*- (met.?) ‘k. of fish’: Zime *wùràhù?* ‘Polypterus bichir’ [*Polypterus bichir*] || E. **?ir*-: Ndam *er-e* ‘fish’.

Omot. **?ur-t*- ‘fish’: N.: Sheko *or-us* || S.: Dime *or-co*.

► AADB 2027.

11.2. **kal*- and **kalul*- (redupl.) ‘k. of large fish’

Sem. **kalul*-: (redupl.) Akk. (SB) *kulil*-, *kulull*- ‘a fabulous creature, part man and part fish’¹²¹ || Mhr. *kell* | Jib. *kāl* ‘whale’.

Chad. **kVl*-: W. **kul-m*-: Hausa *kulm-a/e/i* ‘the name of a large fish’ || C. **kalik*- (redupl.): Bura *kalik-o*, *kilakil-a* ‘a k. of fish’.

Cush. E. **kallu-m*- ‘fish’: SA **kullu-m*-: Afar *kullu(u)m* | LEC **kallu-m*-: Somali *kallúun*, pl. *kalluum-o* | Bayso *kunnum-i* (assim.)

► AADB 2674; cf. Dolgopolkiy 2008 #1030 (apud Thomas).

¹¹⁸ Cf. also *çonbet* ‘snake’.

¹¹⁹ Cf. Arab. *duldul*- ‘hérisson’ and Chad. E.: Tumak *dál* ‘rat géant’, hardly related.

¹²⁰ -*ʕ* in Tgr. and Tna. is non-etymological.

¹²¹ Hardly a Sumerian loanword in view of the Sem. and AA cognates.

11.3. **kawar-* ‘fish (generic?)’

Sem. **kawar-* ‘k. of fish’: ¹²² Aram. ¹²³: Off. *kwr* ‘fish’ | Bab. *kəwār-* ‘fish’ | Jud. *kawr-ā* ‘fish in the cauf; fish in general’ | Mand. *kauar-a* ‘fish’ || Soq. *kúwerhor* ‘espèce de poisson’. ¹²⁴

Chad. **kirw-* and **kukirw-* (redupl.): W. *(*ku*)*kirw-*: Hausa *kukkurw-ai* ‘name of fish’ | Bo-lewa *kerw-o* | Ngamo *kèrw-ò*, *kerh-o* || C. **kikur-*: Mbara *kikur-a* ‘kind of fish (*Tetraodon fahaka*)’ [*Tetraodon lineatus*].

Cush. E.: LEC **ka(w)ar-* ‘fish’: Dasenech *kaara* | Dullay **ka(w)ar(-at)-* ‘fish’: Gawnwata *haar-e* | Gollango *haar-e* | Harso, Dobase *haar-icce* | Tsamai *haar-ite*, etc.

Omot. S. **kār-* ‘fish’: Hamer, Ongota *kāra* ‘fish’.

▲ Cf. Nub (Kenuzi, Dongola) *káre* ‘fish’.

► AADB 372; cf. SED II No. 125; cf. Stolbova 2011 #282.

11.4. **kar-tum-* ‘k. of fish’

Sem. **kar-mut* (met.): Arab. *karīmūt-*, *karīmūt-*, pl. *karāmīt* ‘*Silurus anguillaris*, k. of eel’ (Wehr 1020) [*Clarias anguillaris*] || MSA **ṭarnīk* (met. <**kar-nīt*): Mhr. *ṭarnīk* ‘name of a fish’ | Soq. *tárnīk*, *tánič* | Bothari *tōnēk* ‘a kind of large black čančad (King macherel)’ [*Scomberomorus cavalla*] (Johnstone 1987). ¹²⁵

Cush. E. **kar-ṭum-* ‘fish’: LEC **kar-ṭum-*: Oromo *karṭumm-i* | Dirayta *karṭum-et* | HEC **kar-ṭum-*: ¹²⁶ Sidamo, Darasa *kulti?m-i* | Kambatta *karṭum-* | Alaba *karčum-et* | Hadiya, Burji *karṭum-e*.

▲ Apparently a unique case of a compound word consisting of two root morphemes which are separately preserved only in NAA: **kar-* ‘fish’¹²⁷ and **tum-* ‘fish’¹²⁸ (*t* > *ṭ* in the compound terms influenced by *k*).

► AADB 1054.

11.5. **mawl-ay-* ‘k. of fish’

(?) Egyp. *mr.t* (if <**mVI-*) ‘ein Tier (zwischen Fischen genannt)’.

Chad. W. **mawl(-ay)-*: Galambu *mál-á* ‘eel’ [*Anguilla sp.*] | S.: Bauchi **mwal(l)-aŋ-* (met.) || C. **mawl-ay-*: Mofu *málál-áy* (redupl.) ‘catfish’ [*Siluriformes sp.*] | Kotoko. *mul-ní* ‘poisson: *Gymnarchus niloticus*’ [*Gymnarchus niloticus*] | Musgu-Puss *malaw* (met.) ‘poisson: *Porcus Bayad Bayad*’ [*Bagrus bajad*] || E. **mawl-* (met.): Somrai *mwàl-à* ‘carpe’ [*Cyprinus sp.*].

Cush. E.: LEC **mawl-ay* ‘fish’: Somali *málày* | Jiddu *mallay* | Boni *màlìlái* (redupl.) | Baiso *mole* | Mossiya *môle* | Bussa *mole* | HEC **mawl-iy-*: Sidamo *mwoliyā*. ¹²⁹

Omot. **mawl-ay-* ‘fish’: N.: Wolaita *moliy-a* | Dawro *moly-a* | Male *moll-o* | Dorze, Zergulla *mole* | Chara *mul-ā* | Bworo *mole* || S.: Galila *mol-ta* | Ari *mol-a*.

▲ Too much similarity between Chadic, Cushitic and Omotic forms raises suspicion of interborrowing which is, however, is hard to prove.

► AADB 3668; EDE III, 397.

¹²² Cf. Gz. *kawwara* ‘to set traps, catch fish’.

¹²³ Hardly from Akk. (OB) *kamār-* ‘k. of a fish’ as claimed by some authors.

¹²⁴ Cf. also *kér* ‘kind of shark’

¹²⁵ Though a series of metathetic words, their quadrisconsonantal roots leave little doubt about their links with the Cush. terms, whether related or borrowed.

¹²⁶ Borrowing from Omoto is not to be ruled out.

¹²⁷ Preserved, e.g., in Hausa *karāyā* ‘fish’.

¹²⁸ NAA **tVm-* ‘k. of fish’: Egyp. (Med.) *tm.t* ‘k. of fish’; Chad. C. **tum-*: Munjuk *tum* ‘pêche’, *tumi* ‘pêcher’, Musgu *tum* ‘Fisch’ (rel. to Chad. **tVm-* ‘to fish, fishing’ CED #743). Cf. also Sem. Eth. **taman-*: Geez *taman*, Tgr., Amh. *tämän* ‘snake, dragon’.

¹²⁹ Acc. to EDE 2008, < Omotic.

Typological considerations

Extensive discussion addressing the issue of the Proto-Afrasian homeland in a chronological context can be found in our previous paper (Militarev, Nikolaev 2020). In this part, we only need to make an additional point in light of further evidence presented by semantic reconstruction in the zoonymic field.

The difficulty of reconstructing zoonyms for wild animals at the Afrasian level is hardly unique from a typological point of view. Thus, in Proto-Indo-European, the chronological depth of which is approximately half the depth of Proto-Afrasian, precise semantics can be reconstructed for only a small subset of the terms for wild animals (**bhebhru-* ‘beaver’, **lūnks-* ‘lynx’, **wlk(w)o-* ‘wolf’, **h₂lōp-* ‘fox’, etc.); interpretation of the rest remains difficult. Several examples will suffice:¹³⁰

(1) PIE **h₂eit-* (~**h₃-*) ‘k. of lesser bovid’: Old Indian *éta-* m., *étā* f. ‘a k. of deer or antelope’ | Baltic: Latvian *āita*, dial. *āite* ‘sheep (generic)’ (WP I: 3);

(2) PIE **kerw-* ‘k. of larger bovid’: Slavic **kōrvā* ‘cow’ and **korvъ* ‘ox’ (Old Polish *karw* ‘old ox’) | Baltic **kaᵻwiā* f. : Lithuanian *kárve* ‘cow’ and **kurwa-* m. ‘bull’: Old Prussian *curwis*, acc. *kurwan* ‘bull’ | Germanic **xiru-ta-z, -ēn*, **xiru-tu-z* ‘deer’ [*Cervus elaphus*] | Latin *cervus* m. ‘deer’ [*Cervus elaphus*]; *cerva* f. ‘hind’ | Celtic: Welsh *carw*, Cornish *carow*, Breton *karo* ‘deer’ [*Cervus elaphus*] | Albanian *ka*, pl. *qe* ‘ox’. ♦ The root is sometimes considered to be derived from **k’erh₂(w)-* ‘horn’, but the Balto-Slavic non-*satem* forms contradict this etymology. (WP I: 403 f.);

(3) PIE **dām-*, **dam-* ‘k. of lesser bovid’: Greek (suffixal) δαμάλης m. ‘young steer’, δαμάλη f. ‘young cow, heifer’, δάμαλις ‘young cow, heifer’, dial. ‘pig’, δάμαλος (Hdn.) ‘calf ?’ | Germanic **tam-Vr(-Vl)-* (suffixal): Low Austrian German *zamer*, *zamerl* ‘junger Ochs’ | Latin *damma* or *dāma* ‘a general name for beasts of the deer kind: fallow-deer [*Dama dama*], chamois [*Rupicapra rupicapra*]; buck, doe, antelope’ | Celtic **dam-*: Cornish *da* ‘fallow-deer [*Dama dama*]', Old Irish *dam* ‘ox’, *dam allaid* ‘deer’ [*Cervus elaphus*]; suffixal: Welsh *dafad*, Old Cornish *dauat*, Breton *dañvat* ‘sheep’. ♦ The root is sometimes considered to be derived from **demh₃-* ‘to tame’, but its nominalization and “animal” semantics can be projected back to Proto-Indo-European in any case (WP I: 72 f.);

(4) PIE **sing’h-* ‘k. of large feline’: Proto-Tokharian **śēnś-äke* (suffixal) ‘lion’ [*Panthera leo*]: Tokh. A *śiśäk*, B *śecake* | Old Indian *śimhá-* m. ‘Id.’ | Armenian *inž* ‘leopard’ [*P. pardus*]. (WP II: 508);

(5) PIE **wlp-* ‘k. of wild canine or feline’: Iranian (suffixal): Middle Persian *gurp-ak*, Persian *gurb-a* ‘(domestic) cat’ | Baltic (suffixal): Lithuanian *vilp-iš-ī-s* m. ‘wild cat [*Felis silvestris*]’ | Germanic **wúlfaz* ‘wolf’, **wulbió* ‘she-wolf’ [*Canis lupus*] (a contamination with **wlk(w)o-* ‘wolf’) | Latin *volpēs*, *vulpēs* ‘fox’ [*Vulpes vulpes*] (and *lupus* ‘wolf’, a contamination with **wlk(w)o-* ‘wolf’ and **h₂lōp-* ‘fox’?). (WP I: 317 f.);

(6) PIE **bhel-*, **bhel-* ‘k. of small predator or rodent’: Slavic **bělъ*, **běla* ‘squirrel’ [*Sciurus vulgaris*] (East Slavic only; contaminated with **bělъ* ‘white’) | Latin *fēlēs* f. ‘wild cat’ [*Felis silvestris*], also ‘marten, ferret, polecat’ | Celtic (suffixal) **bel-ego-*: Welsh *bele* ‘marten’ [*Martes martes*] | Germanic (suffixal) **bel-ik-*: Old High German *bilih* m., *bilihmūs* ‘dormouse [*Glis glis*]’; shrew [*Sorex sp.*], Middle High German *bilch* f., German *Bilch* m. ‘dormouse’ [*Glis glis*] (WP II: 177).

Examples like these, which can be easily multiplied, show that the Proto-Afrasian semantic picture as presented in the evidence assembled in this paper, with its mix of (sometimes) precise and (more often) vague, genus- or family- rather than species-based, reconstructions, should not be considered as being out of line with the commonly accepted standards of se-

¹³⁰ All the Indo-European examples are quoted according to Sergei Nikolaev’s online database for Indo-European etymology, hosted by the «Tower of Babel» project (<https://starlingdb.org>).

mantic reconstruction for acknowledged families — even though, of course, this does not imply that researchers in the future should not strive for more semantic precision through more careful analysis of whatever lexicographic or philological evidence is available to them.

Appendix: Alphabetic index of reconstructed roots

- | | |
|---|---|
| <p>*<i>?ačhayl-</i> ‘(big) reptile’ 9.1.
 <i>*?andaw-</i> ‘mouse’ 7.2.
 <i>*?ar-</i> ‘hare’ 7.3.
 <i>*?a/usk-ay-</i> ‘k. of canine or hyena’ 5.3.
 <i>*?away- or *yawa?- (met.)</i> ‘k. of canine’ 5.1.
 <i>*?aw/ys-</i> ‘k. of canine’ 5.2.
 <i>*?ažur-</i> ‘k. of feline, hyena or viverra’ 6.1.
 <i>*?irw-</i> ‘fish (generic?); spawn’ 11.1.
 <i>*?V(n)čaw-</i> ‘k. of smaller carnivoran or rodent’ 7.1.
 <i>*(Ωa-)gwir-</i> ‘k. of bird’ 8.6.
 <i>*šariw- ~ *širaw-</i> ‘k. of feline’ 6.2.
 <i>*ba?y-</i> ‘leopard or lion’ 6.3.
 <i>*ba?is-</i> ‘k. of feline (<i>Felis silvestris</i>)’ 6.4.
 <i>*ba?Vš-</i> ‘k. of canine or hyena’ 5.4.
 <i>*bac-</i> ‘snake, reptile’ 9.2.
 <i>*bar-</i> ‘k. of bird (pigeon, partridge)’ 8.1.
 <i>*bat-</i> ‘k. of snake or worm’ 9.3.
 <i>*bawiḥ-</i> ‘k. of canine’ 5.5.
 <i>*bawr-</i> ‘k. of large carnivorous animal’ 7.4.
 <i>*čirał-</i> ‘k. of bird’ 8.2.
 <i>*čap-</i> ‘k. of smaller carnivoran or rodent’ 7.5.
 <i>*čamb-</i> ‘some water creature’ 10.2.
 <i>*dab-</i> ‘k. of large animal’ 7.6.
 <i>*da(?y)m-</i> ‘k. of feline’ 6.5.
 <i>*dang(w)Vl/r-</i> ‘monkey; dwarf’ 4.1.
 <i>*dVr-</i> ‘k. of bird’ 8.3.
 <i>*dawi?-</i> ‘k. of snake or worm’ 9.4.
 <i>*gVd-</i> ‘k. of canine or hyena’ 5.6.
 <i>*guray-</i> ‘k. of monkey’ 4.2.
 <i>*giwar-</i> ‘k. of feline’ 6.6.
 <i>*gʷam-</i> ‘k. of bird’ 8.5.
 <i>*gʷay- and *gʷagʷay-</i> (redupl.) ‘k. of bird’ 8.4. </p> | <i>*γura?</i> - ‘crow’ 8.7a.
<i>*γurayb-</i> ‘crow, raven’ 8.7b.
<i>*γurayk-an-</i> ‘k. of bird (crane, raven)’ 8.7c.
<i>*har-</i> ‘crocodile’ 9.5.
<i>*has-</i> ‘k. of big snake or crocodile’ 9.6.
<i>*kal- and *kalul-</i> (redupl.) ‘k. of large fish’ 11.2.
<i>*kur(-ay-)</i> ‘k. of canine’ 5.7.
<i>*kawit-</i> ‘dog’ 5.8.
<i>*kawar-</i> ‘fish (generic?)’ 11.3.
<i>*kʷihān-</i> ‘dog’ 5.9.
<i>*kʷay- and *kʷakʷay-</i> ‘k. of crow or bird of prey’ 8.9.
<i>*kʷa?ay- and *kʷakʷay-</i> ‘k. of gallinaceous bird’ 8.10.
<i>*KVʒim- or *KVʒim-</i> ‘dog’ 5.10.
<i>*ka(?a)yr-</i> ‘monkey’ 4.3.
<i>*kVr-</i> ‘k. of big snake or crocodile’ 9.7.
<i>*kar-tum-</i> ‘k. of fish’ 11.4.
<i>*kʷaʃ-</i> and <i>*kʷaʃkʷaʃ-</i> (redupl.) ‘frog’ 10.1.
<i>*kʷar-</i> ‘frog’ 10.4.
<i>*kʷa(?r)-</i> ‘crow, raven’ 8.11.
<i>*labił-</i> ‘lion’ 6.7.
<i>*layč-</i> ‘k. of large feline’ 6.8.
<i>*mawl-ay-</i> ‘k. of fish’ 11.5.
<i>*mary- or *mayr-</i> ‘k. of feline’ 6.9.
<i>*sib-</i> ‘k. of snake or worm’ 9.8.
<i>*sVf-</i> ‘k. of snake’ 9.9.
<i>*sa/ikʷ-</i> ‘k. of lesser animal’ 7.7.
<i>*sawr- and *sarw-</i> ‘k. of feline’ 6.10.
<i>*wahr-</i> ‘k. of canine; hyena’ 5.11.
<i>*wanš-</i> ‘k. of canine’ 5.12.
<i>*ža?ib-</i> ‘k. of scavenger’ 7.8.
<i>*žag(w)-il/r-</i> ‘k. of. monkey’ 4.4. |
|---|---|

Abbreviations

Names of languages

AA – Afrasian = Afro-Asiatic; Akk. – Akkadian; Amh. – Amharic; Arab. – Arabic; Aram. – Aramaic; Berb. – Berber; Bibl. – Biblical Aramaic; Cha. – Chaha; Chad. – Chadic; Copt. – Coptic; Cush. – Cushitic; Dem. – Demotic; E. Wlm – East Tawlemmet; Ebl. – Ebla; Egyp. – Egyptian; End. – Endegen; Enm. – Ennemor; ESA – Epigraphic South Arabian; ESud – East Sudanic; Eth. – Ethiopic; Ez. – Eza; Gog. – Gogot; Gyt. – Gyeto; Gur. – Gurage; Gz. – Ge'ez; Har. – Harari; Hbr. – Hebrew; Hbt – Hobiyot; 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; Msq. – Masqan; MSA – Modern South Arabian; Muh. – Muher; NAA North Afrasian; NE – New Kingdom; NS – Nilo-Saharan; OAKK – Old Akkadian; OB – Old Babylonian; Off. – Official

Aramaic; OK – Old Kingdom; PAA – Proto-Afrasian; PAlt – Proto-Altaic; PCO – Proto-Cushitic-Omotic; Phoen. – Phoenician; PIE – Proto-Indoeuropean; PNorthCauc. – Proto-North-Caucasian; PSEBC – Proto-Semitic-Egyptian-Berber-Chadic; Qat. – Qatabanian; S. Cush. – Southern Cushitic; SA – Saho-Afar; Sab. – Sabaic; Sam. – Samaritan; Sel. – Selti; Sem. – Semitic; SNil – South Nilotic; Soq. – Soqotri; Sum. – Sumerian; Syr. – Syriac; Tgr. – Tigre; Tna. – Tigrinya (Tigray); Ugr. – Ugaritic; Wol. – Wolaita; YB – Young Babylonian.

Terminology

coll. – collective; dial. – dialect; dissim. – dissimilation; f. – feminine; gen. – generic (term); id. – idem; k. – kind; lw. – loanword; m. – masculine; met. – metathesis; pers. – personal; pl. – plural; pref. – prefix; redupl. – reduplication; sg. – singular; sp. – species; subst. – substantiv; suff. – suffix.

Other notational symbols

|| separates branches within a language family

| separates subbranches or groups

- denotes morphemic boundaries¹³¹

Abbreviations of sources

AADB = Militarev, Stolbova 2020

AHw = von Soden 1965–1981

BK = Biberstein-Kazimirski 1860

CAD = Brinkman et al. 1956–2010

CED = Stolbova 2016

DRS = Cohen et al. 1970–1993

EDE = Takács 1999, 2001, 2008

EDS = Parpolo 2015

HSED = Orel, Stolbova 1995

LSF = Attinger 2019

PSD = Anon. 2019 (The Pennsylvania Sumerian Dictionary)

SED II = Militarev, Kogan 2005

WP = Walde, Pokorny 1926–1930

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¹³¹ In some cases, especially for Chadic lexemes, boundaries drawn between the stem and affixes, or between several affixes, may not be exact, since perfect morphemic analysis requires more detailed knowledge of each individual language's morphology and morphophonemics than possessed by the authors.

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А. ИО. Милитарев, С. Л. Николаев. Праафразийские названия некопытных животных в свете проблемы афразийской прародины

В статье представлена вторая порция относительно полного тезауруса праафразийских зоонимов, подготовленного авторами — более шестидесяти реконструированных названий обезьян, собачьих, гиен, кошачьих, грызунов и других млекопитающих, птиц, пресмыкающихся, земноводных и рыб, отражающих максимально полную (на современном уровне наших знаний) картину этих видов фауны в период накануне распада праафразийского языка (11 тыс. до н.э. согласно глоттохронологическим подсчетам) и в зоне обитания праафразийцев, две различные точки зрения на локализацию которой (Левант и Восточная Африка) также обсуждаются авторами.

Ключевые слова: афразийская прародина; афразийские (афро-азиатские) языки; этимология зоонимов; реконструкция культурной лексики.