

---

DOI: 10.14746/linpo.2022.64.2.4

## Mubi-Toram lexicon and Afro-Asiatic III: Lexemes with initial \***b**-<sup>1</sup>

Gábor Takács

Department of Classical Philology, University of Łódź (UŁ)  
Lexicographical Library of Afro-Asiatic Root Research at Balatonederics (LLAARR)  
Member of the Associazione Internazionale di Studi sul Mediterraneo e l'Oriente, Roma (ISMEO)  
e-mail: gbtak@datatrans.hu | ORCID: 0000-0002-2466-6451

**Abstract:** Gábor Takács, *Mubi-Toram lexicon and Afro-Asiatic III: Lexemes with initial \*b-*. The Poznań Society for the Advancement of Arts and Sciences, PL ISSN 0079-4740, pp. 77-105

The paper is another part of a planned longer series designed to step by step reveal the Chadic and wider Afro-Asiatic cognate heritage in the lexical stock of the Mubi-Toram languages which represent the easternmost (27th) group of the vast (6th) Chadic branch of the gigantic Afro-Asiatic family.

**Keywords:** Afro-Asiatic (Semitic-Hamitic) comparative linguistics, Chadic, etymology.

### Introduction

Mubi-Toram is a group of languages in the Republic of Chad (some of them pretty close to the border with Sudan<sup>2</sup>) suggesting to be regarded as remnants of the last proto-Chadic

<sup>1</sup> This paper has been prepared in the frames of the ARR grant of the University of Łódź. I am indebted to Prof. Krzysztof Tomasz Witczak (Department of Classical Philology, University of Łódź) for his encouragement and support.

<sup>2</sup> Like, e.g., the Kajakse and Kujark/ge, the easternmost forerunners (?) of the Chadic family examined by P. Doornbos and M.L. Bender (1983: 59-60), who localized Kajakse in “Wadai, between 12 and 13°N and between 20°30' and 21°30'E. ... The Kajakse are concentrated around Jebel Kajekse and five similar hills in the neighborhood”. The Kajakse are known to them “also as refugees in the border zone on Sudanese territory.” They described the Kujarge as inhabiting “seven villages in Chad near Jebel Mirra (11°45'N – 22°15'E); also scattered among Fur and Sinyar in Sudanese villages along the lower Wadis Salih and Azum.” Both authors are disposed to identify the latter people with the Birgit in the same group: “As Chadic speakers, their name might point to their being Chadian Birgid, because Fur and Daju neighbors of the Sudanese Birgid call them Kajjar, and both Chadian and Sudanese Birgid have the same self-name of Murji. Informants disagree whether their origin lies in Darfur or in their present habitat. The Kujargé are bounded to the west by the Daju-Galfigé; to the north by the Sinyar; to the east and south

invaders from the eastern direction).<sup>3</sup> This group belongs to the eastern subbranch of Chadic and thus represents the member of the immense Afro-Asiatic (Semitic-Hamitic) macrofamily comprising six equipotential branches: Semitic, Egyptian, Berber, Cushitic, Omotic, and Chadic. Mubi-Toram is namely the last (26<sup>th</sup>) Chadic group in the classification proposed by H. Jungraithmayr (JI 1994 II xv). This is one of the least studied Chadic groups from the standpoint of both lexicography and comparison. For each of its daughter languages we usually find just one wordlist, among them only Mubi is relatively better provided with sources.<sup>4</sup>

The success of modern research on Chadic phonological and lexical reconstruction (initiated by V.M. Illič-Svityč and P. Newman in the mid-sixties of the 20<sup>th</sup> century) fundamentally depends on how the internal (Chadic) reconstruction and external (Afro-Asiatic) comparison of every single individual Chadic language group proceeds at the same time. Unfortunately, out of the 26 Chadic groups, only six (namely, Angas-Sura, Bole-Tangale, North Bauchi, Bura-Margi, Mafa-Mada, Kotoko) have been so far more or less satisfactorily studied from this viewpoint.<sup>5</sup>

The work on the projected comparative lexicon of the Mubi-Toram languages has been begun by the author in summer 2008.<sup>6</sup> The present series of papers<sup>7</sup> is to integrate this remote lexical stock in its wider Chadic and Afro-Asiatic context by providing materials for the research outlined above.

by the Fur-Dalinga, Fongoro, Formono, and Runga. ... This population may very well have been slaves of the Daju Sultans of Der Sila, removed from the western boundary by force or conquest, to protect or populate the eastern boundary of the sultanate.”

<sup>3</sup> For the hypothesis of a long wandering of Chadic ancestors through the Wadi Howar due to disappearing green Sahara in the Holocene see most recently Jng. 2020, esp. 15-18 and 34-44.

<sup>4</sup> Birgit: Jng. 1973 MS and 2004; Jegu: Jng. 1961; Kofa-Mogum: Jng. 1977 MS; Masmaje: Alio 2004; Kajakse: Doornbos & Bender 1983, Alio 2004; Kujarke: Doornbos & Bender 1983; Masmaje: Alio 2004; Minjile: Doornbos & Bender 1983; Mubi: Lukas 1937; Jng. 1990 MS, Doornbos & Bender 1983; Toram: Alio 1988 MS and 2004.

<sup>5</sup> Although my research on the lexical reconstruction of the individual Chadic groups dates back before the turn of the millennium (thus, e.g., Angas-Sura since 1998, Dangla-Migama and Mubi-Toram since 2008), my work in this domain has only become accelerated and more extensive since the spring of 2019, when a whole set of further Chadic groups (North Bauchi, Musgu, Masa) as well as Southern Cushitic and Omotic were subject to a simultaneous comprehensive lexical reconstruction. This research has been manifested since 2021 in the new project of micro-reconstructions in the Southern Afro-Asiatic lexical root stock with the support by the grant “Advanced Research in Residence” (ARR) of the University of Łódź, which I gratefully acknowledge in this place.

<sup>6</sup> The author expresses his gratitude to the Alexander von Humboldt-Stiftung (Bonn, Germany) for permanently supporting his research in 1999-2000, 2002, 2005, 2008, 2020 at the Institut für Afrikanische Sprachwissenschaften of the J.W. Goethe University (Frankfurt a/M), where the materials a.o. for the present paper were mostly collected. My cordial thanks go also to Prof. Khalil Alio (University of N'Djaména, Chad Republic) for submitting his field research records at my disposal in 2002.

<sup>7</sup> Its first part with roots having a \*b- in the *Anlaut* was published in *Acta Orientalia Acad. Scient. Hung.* (Budapest) 62/3 (2009), 315-336. The second part of this series with addenda to Mubi-Toram \*b- is forthcoming in *Lingua Posnaniensis* (Poznań) 63/2 (2021).

### Mubi-Toram lexemes with \*b - + dentals

**151. Mubi** **búdígē** (m), pl. **bóddúk** “coquillage” [Jng. 1990 MS: 7] may derive via the metathesis of glottalization from a root like  $*\sqrt{b}\dot{d}K$  (< AA  $*\sqrt{bt}/\dot{c}/\dot{ç}/\dot{ç}K$ ) which appears at the moment to be isolated with this meaning and so, for the time being, one is better disposed to suppose here an innovation, cf. perhaps Sem.  $*\sqrt{bt}\dot{k}$  > MSA: Sqt. bdq, Mehri baðaúq “(se) déchirer” (MSA: DRS 78, bdq) ||| ES: Amh. bättäqä “trancher”, bäççäqä “déchirer avec les mains, les dents, etc.” [DRS 60, btq1: isolated in Sem.], which represent members of a widespread family of PAA root varieties (dealt with in detail in EDE II 614-616), cf. SAA  $*\sqrt{pt}\dot{k}$  ~  $*\sqrt{ptg}$  “to split open” [GT], PAA  $*\sqrt{ft}\dot{k}$  ~  $*\sqrt{fd}\dot{k}$  “to tear apart” [GT], PAA  $*\sqrt{ptk}$  ~  $*\sqrt{ptg}$  “to separate, open” [GT].

**152. Kajakse** **bítar** “varan” [Alio 2004: 240, #55] seems to have been extended by the C<sub>3</sub> root suffix (nominal class marker of certain animals assumed by I.M. Diakonoff) and so it may well belong to a biconsonantal AA root signifying some sort of lizard, cf. SAA  $*bit-$  “lizard sp. (?)” [GT] > NOm.: Dime betá “lizard” [Fleming in Bender 2003: 213, #82: isolated] ||| HECu.: Burji bīt̪-é (f) “lizard”, cf. also búč-i (m) “lizard” [Sasse 1982: 36, 41, resp.: isolated in ECu.]<sup>8</sup> = bīt̪-e/ē (f) vs. buč-i (m) “lizard” [Hudson 1989: 93] ||| WCh.: (???) Angas bít (so, with -t) [regular metathesis <  $*bit?$ ] “otterähnliches Wassertier, dessen Bissee gefürchtet wird” [Jng. 1962 MS].<sup>9</sup> See Takacs 2022: 129, #95 (not discussed in EAAN I).

**152.1.** In, for semantical considerations, it is difficult to be tempted by the homophony of Ch.  $*\sqrt{bdr}$  “worm” [GT] > CCh.: Mada bédđèl “ténia, ver solitaire” [Brt.-Brunet 2000: 67] ||| ECh.: Mokilko bétérè (f) “Würmer (Eingeweide)” [Lukas 1977: 224].

**152.2.** This is the case also with Chadic (or PAA???)  $*\sqrt{btr}$  “1. worm, 2. snake” [GT] > Sem.: (?) Akk. mubattiru (jB) “ein Wurm (?)” [AHW 665]<sup>10</sup> ||| Eg.: uncertain traces of an hypothetic and vague old  $*bt3.w$  [<  $*btr???$ ] “worm” (GT)<sup>11</sup> ||| CCh.: Daba mburutu “ver de Guinée, draconcule” [Mouchet 1966: 137] | Mafa-Mada  $*bUtUr-$  “horned viper (?)” [GT]: Gisiga botoro “Art Brillenschlange” [Lukas 1970: 118], Mofu-Gudur batara ~ botoro “vipère cornue” [Brt. 1988: 85] = bätärà “serpent sp.” [Brt. 1978: 50], Mofu-Mokong bòtòrò “serpent sp.” [Brt. 1978: 50] | Zime-Dari bündör “serpent sp.” [Cooper 1984: 2], Lame büdör “snake

<sup>8</sup> H.-J. Sasse (l.c.) was disposed to combine these words with the Oromo reflex of LECu.  $*būt-$  “puff-adder” [Black 1974: 187], although its Burji reflex is būt-ē. W. Leslau (1988: 184), in turn, compared the Burji term with HECu.: Sidamo bīt̪-e “kind of small bird”.

<sup>9</sup> Apparently an isolated record not even found in other Angas lexicons. A misrecorded *Auslaut* of Angas biip “big water animal with short tail (bites severely): otter (?)” [Foulkes 1915] < AS  $*bip$  “a small mouse-like animal” [GT 2004]?

<sup>10</sup> Explained in the AHW 144 as a derivative of butturu “verstümmeln”.

<sup>11</sup> Cf. the snake det. in Eg. bt3.w (var. of bt̪.w) “Bez einer unheilbaren Krankheit” (Med., Lit. MK, Wb I 485, 13).

sp.” [Sachnine 1982: 288]<sup>12</sup> || ECh.: WDangla bōttōr (m.sg.coll.) “petit ver parasite du mil (sur épis)” [Fédry 1971: 91].

### Mubi-Toram lexemes with \* b- + sibilants

**153. Birgit baaží (baažá, baažò)** “foquer” [Jng. 2004: 351] | Bidiya baaž (baaží, baažèŋ), pl. bažàw (bažàawí, bažàawenj) “demander en mariage, choisir une épouse” [AJ 1989: 61]: their common \*baž- may presumably derive from a common ECh. \*bađy- “to make efforts for/in the marriage (?)” [GT] || SBrb.: Ahaggar bezbez “copulation (entre 2 personnes de sexes différents)” [Foucauld 1951-2: 118; DRB 154, bz4: isolated in Brb.].<sup>13</sup> One is disposed to eventually affiliate hereto further AA roots:

**153.1. PAA \***√bč “1. to press (out?), 2. eject fluid (by pressing?)” [GT] > Sem.: Syrian Ar. bazz “1. faire jaillir en pressant, lancer, rendre par jets, 2. procréer des enfants en grand nombre” [DRS], cf. also Classical Ar. bazza (bađđa) “faire des efforts, travailler avec zèle et assiduité à qqch.” [BK I 139] (Ar.: DRS 61) vs. Ar. √bwz I “1. injecter, lancer le sperme dans l’utérus” [BK I 178] = “éjaculer, copuler” [DAFA 917b] = “éjaculer” [DRS 51: isolated in Sem.] || NBrb.: Shilh bizzi “jaillir” [DRB] (NBrb.: DRB 155, bz7: isolated in Brb.?) || CCh. \*bVc- < \*\*bVč- “to press, squeeze” [CLD]:<sup>14</sup> Higi-Bana bésá “presser, extraire beaucoup de liquide” [CLD < ?] | Paduko bičə “serrer” | Lamang bica “to press (through sieve)” [Wolff], cf. also Lamang əbica (sic: -b-) “to squeeze” [Hamm], Vemgo bīcu “to squeeze” [Hamm] (CCh.: CLD VI 75, #153a).

**153.2. PAA \***√bč “1. seed, semen (???)” [GT] > presumably Sem. \*√byt: Ar. bayż- “sperme” [DRB 155, byt: isolated in Sem.?]<sup>15</sup> || ECu. \*bVd(ah)- (\*-d- obscure) “seed” [GT]: Arbore bāđ-o (f) “seed prepared for sowing” [Hayward 1984: 345] | Grawada podahhō “Saat” [AMS 1980: 264] || NOM.: Zergulla bičę-tta “seed” [Siebert-Hoeft in Bender 2003: 93, #114a] || (???) SOM. \*bēt-a “seed” [GT]:<sup>16</sup> Ari bēta [Tsuge 1996: 169, #184], Banna bēta

<sup>12</sup> Note that N. Skinner (1996: 21) equated Lame budor mistakenly with Sem. \*batm- (for details see Eg. btn.w above) and LECu. \*būt-.

<sup>13</sup> Affiliated by K. Naït-Zerrad (DRB l.c.) with NBrb.: Mzg. bbeż “plonger, immerger, (s’)enfoncer” [Taifi in DRB] | Mzab ə-bbeż “1. tremper, plonger dans un liquide ou ailleurs, 2. coiter” [Delheure 1984: 17], Wargla bbeż “tromper, plonger, piquer, enfoncer une pointe, un objet quelconque par un bout dans un liquide” [Delheure in DRB] | Qabyle e-bbeż “plonger, enfoncer” [Dallet 1982: 61] (NBrb.: DRB 154-155).

<sup>14</sup> Based by O.V. Stolbova (CLD VI 75, #153a) on a semantically unreliable comparison with CCh.: Zulgo (Zelgwa) buc “masser, pétrir avec la main” [Haller et al.], Mafa mbác- “piétiner” [Brt.], Muyang ámbac “to crush an object” [Smith]. She even took note of Lamang əbica [Hamm] vs. Lamang bica [Wolff] and Zulgo bac, bac “tuer; briser, casser”, although she too admitted that a “secondary emphatization (bVc- > bVc-) is not regular”, but “in a number of languages two emphatics are not compatible in one word”. Her comparison of all these diverse CCh. parallels with Sem.: Ar. √bšw I “presser (son débiteur en réclamant de lui son dû)”, II “rendre eunuque” [BK I 133] is either semantically or/and phonologically vague.

<sup>15</sup> Of course, the DRS (l.c.) attempts at rendering this isolated form as a variation of Sem. \*√byš “white”.

<sup>16</sup> Provided it displays the same glottalization metathesis (i.e., \*bēt-a < \*\*bēt-a < \*\*bēč-a???) that has so far been only known in Chadic. Otherwise, one is disposed to affiliate it with Om. \*√bd “(to sow) seed” [GT]. Cf. Takacs 2022: 128, #85.

[Masuda apud Tsuge 1996: 186, #184], Hamer beta [Fleming] = b̄eta [Tsuge 1996: 169, #184], Karo p̄eta [Fleming], all reflexes signifying “seed” (Aroid: Bender 1994a: 157; 2003: 216: #114).

**153.3. PAA** \* $\sqrt{b\check{c}}$  “2. offspring, child” [GT] > NBrb. \* $\sqrt{bz}$ : Wargla ta-bza “marmaille, enfants, jeunesse”, Figuig a-bziz “garçon”, Snus l-bezz “marmaille”, a-bz̄ez “petit enfant” | Tamazight bezz (var. de bezz) “enfanter” (NBrb.: DRB 155, bz11: var. to \* $\sqrt{bz}$ ) ||| LECu.: Saho and Afar bād-ā, fem. -á “Kind: 1. Sohn, Tochter, Knabe, Mädchen, 2. bei Tieren das Junge” [Reinisch 1886: 829-830; 1890: 83-84]<sup>17</sup> = Saho barha “son”, barhä “daughter” [Vergari 2003: 53] = Afar bād-ā “figlio”, fem. bād-á “figlia” [Colizza 1887: 112] ||| NOM.: PYemsa \*buđ- (???) [GT] > Yemsa bur(?)ussi (nur als Plural belegt) in: burus-nì kit/yó “Kinder, Buben”, burussí-sà kit/yó “die Kinder, Buben” [Lamberti 1993b: 333: isolated in Om.]

**153.4. PAA** \* $\sqrt{b\check{c}}$  “genitalia” [GT] > Sem.: NSyr. (?) būtā [-t- regular < Sem. \*-t̄- < AA \*-č̄-] “pénis” [DRS 51-52: dubious Sem. etymology]<sup>18</sup> ||| NBrb.: Shilh a-bazza “verge (membre viril)” [DRB 155, bz7: isolated in Brb. ?]<sup>19</sup> ||| LECu.: Afar budd-e (f) “penis” [PH 1985: 139]<sup>20</sup> = Saho-Afar buddhe “Penis” [Lamberti: -ddh- < \*-d̄-] | Oromo biṭṭo? “penis” [Lamberti]<sup>21</sup> > SOromo dialects biṭi “penis” [Stroomer 1987: 274] ||| NOM.: PYemsa \*buđ- (???) [GT] > Yemsa bur?à [GT: -r?- < \*-d̄- may be regular] “Penis” [Lamberti 1993b: 333: isolated] (Yemsa-LECu.: Lamberti 1993b: 333).<sup>22</sup>

**153.5.** Presumably the same biradical core root survives with a nasal and a C<sub>3</sub>\*-r root extension (?) in Sem. \* $\sqrt{btr}$  [DRS] > \*bi(n)t̄ur- “clitoris, vagina” [SED]:<sup>23</sup> Akk. (OBab., Standard Bab.) biṣ(sū)r-u “weibliche Scham” [Holma] = biṣṣūr-u “female genitals” [CAD b 268] = biṣṣūr-u “weib. Scham, vulva” [AHW 131a] = “vulve” [DRS] || Ar. bāzr- ~ bazar- ~ bayzar-

<sup>17</sup> Of course, neither of the comparisons (Somali wil or Macro-Canaanite \* $\sqrt{bn}$ , \* $\sqrt{br}$  “son”) offered by L. Reinisch (1886: 829) is phonologically convincing.

<sup>18</sup> Cf. Sem. \*bawç/- “bottom” [GT]: Mandaic buṭa “bottom, anus (still used)” [Drower-Macuch 1963: 54] = “anus, derrière” [DRS 51], NSyr. būṣā “croupe” (borrowed < Ar.) [DRS] | Ar. būṣ- “fesses” and baws- “3. chairs grasses et molles de fesses”, cf.  $\sqrt{bwṣ}$  II (denom.) “avoir les fesses très-grandes” [BK I 178] = būṣ- and baws- “croupe saillante, callypigie” [DRS], cf. also Ar. buṭut- (root ext. -ṭ̄- and -t̄-?) “2. fondement, derrière avec les parties de la génération” [BK I 140].

<sup>19</sup> Affiliated by K. Naït-Zerrad (DRB l.c.) with a phonologically apparently distinct root, cf. EBrb.: Ghadames ta-baḥṣuṣṣ “queue d’animal (cheval, chacal)” [Lanfray 1973: 7, #43] || SBrb.: Kel Ui ta-basus-t “queue” [DRB] || NBrb.: Shilh a-baṣṣa ~ a-ṣabba “queue (d’animal)” [DRB] | Tamazight a-baṣṣa, pl. i-baṣṣ-iw-n “queue (d’animal)” [Taifi 1991: 35] = a-bassa ~ a-baṣṣa ~ ta-bzza-t [DRB] (Brb.: DRB 130, 133, 148).

<sup>20</sup> Equated by Ch. Ehret (1995: 112, #101) with Ar. bāzr- (verbal noun) “to grow fat” and NOM.: Bench(non) pūč “many, much” < AA \*-pūč- “to increase (intr.”.

<sup>21</sup> M. Lamberti (l.c.): “Entsonorisierung des Ejektivs” in Oromo.

<sup>22</sup> Whence M. Lamberti (l.c.) set up an “altkuschitische” stem \*b/mud- “penis” which he eventually derived from the homophonous verbal root “sprossen” assuming an interchange of \*b- vs. \*m-.

<sup>23</sup> The AA etymology of the Semitic stem has been obscure. The authors of the DRS l.c. assumed a trilateral root manifesting itself in bāzr- (badṛ-) which was secondarily enlarged by an infixed nasal or -y- extension: “L’ar. connaît d’autres formes à élargissement” in bunżur- (bunḍur-), bayzar- (bayḍar-). One wonders if and how Ar. bīzir- (bīḍir-) “(femme) vulgaire, à la langue bien pendue” and ta-bażrama (ta-baḍrama) “se montrer vulgaire” (Ar.: DRS 61) are also connected to this triradical root. Regarding their reconstruction as “reliable, though attested in Akk. and Ar.”, L. Kogan and A. Militarev (SED l.c.), in turn, were disposed to regard the nasal as part of the original quadrilateral root: in their view, Akk. -ṣṣ- “may point to \*-nṣ-”.

~ bunzur- “clitoris” [BK I 139] = bazr- “clitoris”, cf. bazr-at- ~ buz(ür)r-at- “1. excroissance (de la lèvre supérieure), 2. (qfqf.) touffe de poils (sous l’aiselle, etc.)” [DAFA 695], cf. a root variety in baðr- “clitoris feminae quae praecidi solet” [Freytag I 128] (Sem.: Holma 1911: 101; DRS 61; SED I 35, #37).

### Mubi-Toram lexemes with \*b- + velars

**154. MT \*bāk “to fear” [GT]:** Mubi báágà, bìgáágà “sich fürchten” [Lukas 1937: 180] = bāagá (báágà, bígáágà) “craindre” [Jng. 1990 MS: 6], Kajakse bāake “peur”, bāakì (acc.) “avoir peur”, bāakúwò “peureux” [Alio 2004: 240, #52-54], Masmaje bāakò “peur” [Alio 2004: 280, #29] | DM \*bāk- “to fear” [GT]: EDangla bāakē “craindre, avoir peur”, bāakīrà “peureux, froussard, craintif, trouillard”, bākāw (f) “la peur, la crainte, la frousse, l’effroi, la frayeur, l’angoisse, l’affolement, le trac” [Dbr.-Mnt. 1973: 57] = bāakē “fürchten, Angst haben” [Ebobisse 1979: 130; 1987: 83], Bidiya bāak (bāakí, bāakèñ), pl. bākāw (bākāwí, bākāawēñ) “avoir peur”, bāakò (f) “peur” [AJ 1989: 61], Migama báyáw (bāyé, bāyakká) [-y- < \*-k-?] “craindre”, bāyāakà (m), bāyāaká (f), pl. bāyāakée “peureux”, bāyāakí (f) “la peur” [JA 1992: 73] || NAgaw: Bilin bayāy-ä “Schreck, Bestürzung” [Reinisch 1887: 71] || ECu. \*baķ- “to be afraid” [Sasse 1982: 32]: e.g. PNSomali \*baq- “to be afraid” [Ehret & Nuuh Ali 1984: 228]: Somali bāq-a ~ bāy-a “Furcht, Schreck” & “sich fürchten” [Reinsch 1902: 79] = bāq-ayya “to be(come) afraid” [Abraham 1964: 27] || SCu.: perhaps Ma'a bug-ú [-g- irregular < \*-k-] “fear, doubt”, bug-é “coward”, -bugéno “to fear” [Ehret 1980: 138, §I.A.45].<sup>24</sup> So far, within the MT group, only the Mubi reflex has been involved in the AA comparison, cf. IS 1966: 28 (Mubi-Bilin-Somali); Dlg. 1966: 50; 1967: 9, #6; 1973: 265 (Bilin-ECu.-Mubi); SISAJa I #81 (Bilin-ECu.-WCh.-Eg.); HCVA II #93 (Cu.-ECh.).

**155. Mubi bók “1. (tr.) gießen”, 2. (intr.) regnen” [Lukas 1937: 181] = (?) \*bok “rain” [Doornbos-Bender 1983: 77, #63] | Tumak bāg “verser (vider)” [Caprile 1975: 50] | presumably DM \*bok- “1. to issue, 2. appear” [GT]: WDangla bōkè “apparaître, surgir” [Fédry 1971: 106], EDangla bōkē “apparaître, surgir, jaillir” [Dbr.-Mnt. 1973: 59], Bidiya bōk (bōkí, bōkeñ), pl. bōkow (bōkoowí, bōkooweñ) “jaillir”, bōkōbōkò (m) “issue de secours dans un terrier de rats” vs. bōok (bōokí, bōookèñ), pl. bōkōw (bōkōowí, bōkōoweñ) “1. apparaître, 2. pousser” [AJ 1989: 62] < ECh. \*√bōg “to pour” [JS 1981: 206A<sub>2</sub>] = \*bok- > \*bok- “to flow” [Stolbova 1996: 126] = \*bok- < \*\*bōk- (via metathesis of glottalization) “1. to issue (intr.), 2. pour out” [GT] || PCu.-Om. \*bVk(l)w- (?) “течь” [Dlg.] = PCu. \*bok- “to be moist” [Ehret 1987: 16, #12] > NAgaw: Bilin boq-s, buq-s (caus.) “ausgießen, vergießen” [Reinisch 1887: 76], Kemant boh-t y (refl. pass.) “se verser, être versé”, boh-š y “verser, répandre” [CR 1912: 176], cf. also Bilin bķu “couler” [Cohen] = bāqū, bawq “gerinnen (Milch)”, boq “Tropfen”, boq y “tröpfeln” [Hintze 1951: 84, #385 pace Reinisch], Kemant bah- “to be moist” [Ehret 1987: 16, #12] (NAgaw: Hohenberger 1978: 45 with false AA comparanda) ||**

<sup>24</sup> Combined in Ehret l.c. with ERift: Qwadza beʔ-et- “to scorn” < SCu. \*bō/ħk- “to avoid, keep away from, have an aversion to”, which is semantically all too vague.

ECu.: Yaaku -poq- [p- reg. < \*b-, also AA \*p-?] “to pour in” [Heine 1975: 131] || SCu. \*bōk<sup>(w)</sup>- “showers, mist, drizzle” [Ehret 1980]: Qwadza bo<sup>2</sup>-uto [-? regular < \*-k-] “dew” | Ma'a i-buk-éta ~ i-buh-éta “long rains (March-May)” (SCu.: Ehret 1980: 138, §I.A.44; Cu.: Ehret 1987: 16, #12) || NOm. \*bukk-/\*bukk- “to rain” [GT]: Ometo \*buk- “to rain” [GT]: cf. esp. Kachama bāq, buq [CR] = bok- [Blažek], Gamu bukk- [Blažek], Wolamo buk- “pleuvoir” [Cerulli], Haruro boq-āys “piovere” [CR 1937: 641] (NOm.: Bender 1987: 34, #63.b; LS 1997: 316; Blažek p.c.) || SBrb.: Ahaggar a-həy “2. recueillir du liquide” [Prasse 1969: 63, #337] || Sem.: PAr. biliteral \*√bq = \*buq “лить, течь” [Belova 1993: 35, #29] = \*√bk “to flow” [Ehret 2000 MS: 7, #1056] > Ar. baqqā “2. verser beaucoup de pluie, de grandes et abondantes pluies (se dit du ciel)” [BK I 148, 143] = baqqā “1. to pour, 2. sprinkle, 3. speak much” [Zaborski 1971: 56, #18 with its biliteral Sem. background] vs. ba<sup>a</sup>qa “arroser copieusement (se dit d'un nuage)” [BK I 148, 143] = ba<sup>a</sup>qa “arroser le sol” [Cohen] = “verser abondamment” [DRS] vs. bawq- “shower” [Ehret]<sup>25</sup> < PAA \*√bk vs. \*√bk (both varieties are attested) “1. to pour, hence: (to) 2. rain, 3. snow” [GT]. The reflexes of this and some further root varieties below have been time to time connected in the comparative literature.<sup>26</sup>

**155.1. PAA \*√bk** “1. to pour, hence: (to) 2. rain, 3. snow” [GT] is attested in NBrb.: Shilha a-bukku “neige” [DRB], Shilha of Tafilelt a-bōkko “neige” [Laoust 1920: 189] | Beni Snus t-bika & t-biša [-š- < -k-], Figig t-biša “pluie” [DRS] (NBrb.: DRB 10, 49) || PCu.-Om. \*bVkk<sup>w</sup>- “дождевая туча (rain cloud)” [Dlq.]: PCu. \*b/pok<sup>w</sup>- “mist, drizzle” [Ehret 1987: #98].<sup>27</sup> Beja bayúk [-k < both AA \*-k and \*-k] “Schnee” [Seetzen] || LECu.: Oromo bokk-ā “rain(fall)” [Bitima 2000: 62] (Oromo: Blažek 2010: 38 based upon, i.a., LVC 1992; LECu.: Dlg. 1973: 270) || NOm. \*buk “rain” [Bender 1987: 34, #63.b; 1994b: 1157, #63] = \*bukk-/\*bukk- “to rain” [GT]: cf., e.g., NWOMeto \*buk- “to rain” [Bender 2003: 120, #105b]; Wolayta bukk- “to rain” [LS], Malo buk- [Bender], Dawro buk- “to rain” [LS], Dache bukk- “to rain” [LS], Oyda buk- “to rain” [Fleming apud Bender 2003: 61, #105b] (NWOMeto: Bender 2003: 22, #105b) | SEOmt. \*buk- “to rain” [Bender 2003: 92, #105b]: Koyra buk/tt-[Hayward], Zergulla buka “1. to hit, 2. rain” [Linton] etc. (SEOMeto: Bender 2003: 333, #43) | Gimirra-Benesho (Bench-non) buk 3-4 [Breeze], She buka [Fleming] “to rain” (Gimirra: Bender 2003: 171, #105a) | Kafa-Bosha buči/ye “rain” [Fleming & Lewis in Bender 2003: 171, #105a] | Dizi buk-u (vb.) “to rain” [Toselli in Bender 2003: 215, #105] (NOm.: Bender 1987: 34, #63.b; 1988: 149; 2003: 22, #105b; 2003: 241, #105b; LS 1997: 316; Cu.-NOm.: Dlg. 1973: 270; Bender 1994b: 1157, #63) || WCh.: Hausa bfíkò “2. rain which succeeds sowing” [Bargery 1934: 106] = mū sààmí bfíkò “3. rain fell after we'd sown our crops” [Abraham

<sup>25</sup> Derived by Ch. Ehret (2000 MS: 4, #1038) as a C<sub>3</sub> \*-k “intensive of effect” root extension derivative of AA \*-p/baw- “to flow” based on PSem. \*√bw<sup>l</sup> “to flow out” (“finitive” extension \*l), LECu.: Arbore baww “lake” (sic).

<sup>26</sup> ECh.-Ar.: Stolbova 1996: 126; Ar.-Cu.: Cohen 1947: 173, #385; Agaw-Ar.: Dlg. 1966: 50; 1973: 274; DRS 74-75; Sem.-Brb.-Cu.: Diakonoff 1992 MS: 12; Ar.-Mubi-Agaw: HCVA II #96; HSED #199; Koyra-PCu.: Ehret 1995: 83, #12; Cu.-Sem.: Ehret 2000 MS: 7, #1056.

<sup>27</sup> The Koyra-PCu. isogloss was combined in Ehret 1995: 83, #12 with Sem.: Ar. bakk- (verbal noun) “to vomit” < AA \*-bōk<sup>w</sup>- “to leak, seep, run out”.

1962: 100] = bììkò (sic) [Stolbova] | AS \*p<sup>h</sup>uk [GT]: Goemay phuk (so, ph-) “to empty the contents of a vessel into another one with short and sudden movements” [Sirlinger 1937: 178].

**155.2. PAA \***pk “to pour” [GT] > SBrb.: EWlmd. tè-ffīəy-d<sup>u</sup> “transvase-le donc” [Nicolas 1957: 574] ||| ECu.: perhaps Yaaku -poq- [p < both AA \*b and \*p?] “to pour in” [Heine 1975: 131] ||| CCh.: Hitkala (Hide, Lamang) pya “1. verser, renverser, 2. déshabiller” [Eguchi 1971: 224]. Cf. also Takacs 2006b: 128 for the supposed Angas reflex.

**155.3. SAA \***bg “to pour” [GT] = **\*-beg-** “to spill, pour (intr.)” [Ehret 2000 MS: 4, #1038]<sup>28</sup> > ECu. \*beh- “to pour, spill (intr.)” [Ehret]<sup>29</sup> ||| WCh. \*bg “to pour” (in NBauchi and Ngizim) [JS 1981: 206A<sub>1</sub>].

**155.4. PAA \***pk (var. \*pQ?) “to pour out” [GT]: Brb. \*fk “to pour” [GT]<sup>30</sup> > EBrb.: Audjila e-ffok, ffok (tr., intr.) “1. versare (verser), 2. colare (couler)” [Paradisi 1960: 177 quoted also in DRB] ||| WBrb.: perhaps Zenaga e-ffug “verser” [TC 2008 quoted in DRB 541, FG16: isolated] ||| SBrb.: Ghat ə-ffæk (DRB: f pharyngalisé) “verser, être versé” [PAM 2003: 156] (Brb.: DRB 551) ||| PCh. \*pg “to pour” (in CCh., Kera) [JS 1981: 206A<sub>3</sub>] > WCh.: AS \*p<sup>h</sup>uk [GT]: Goemay phuk (so, ph-) “to empty the contents of a vessel into another one with short and sudden movements” [Sirlinger 1937: 178] (Takacs 2004: 291: isolated in AS) ||| CCh.: Bachama púkó “to pour” [Carnochan 1975: 465] ||| ECh.: Kera pükí “vergießen” [Ebert 1976: 89] | EDangla pàke “gießen” [Ebobisse 1979: 126; 1987: 84]. See also EAAN I 81, #367.

**156. MT \***bokl-/\*kobl- “hinder part” [GT]: Kofa bòkólà (f), pl. bòkál “anus” [Jng. 1977 MS: 4, #34], perhaps Toram kobele [met. < \*bokl-] “fesses” [Alio 2004: 258, #249] ||| WCh.: Angas-Sura \*balak (or \*bolok?) [GT]: Kofyar bòlòk (so, -a/-o-!) “bottom, anus” [Netting 1967: 2] (Takacs 2004: 26: isolated in AS).<sup>31</sup> This root with these three radicals disposed to metathetic shifts (including an \*-l-) seems at the moment to be only present in Chadic. Still, may one present here a striking set of highly puzzling candidates for being reflex of an almost homophonous triradical PAA root (with an unknown sibilant in the place of \*-l-):

**156.1. S<sup>2</sup>AA \***bkS (denoting some hinder or bottom part of the body) [GT] > Eg. bqs.w [irregular -s- < AA \*-S- ~ \*-l-?]<sup>32</sup> “Rückenwirbel, Wirbelsäule(kanal)” (PT, Wb I 480, 8-12;

<sup>28</sup> Based by Ch. Ehret (2000 MS: 4, #1038) on Sem.: Ar. bagš- (verbal noun) “to gush forth”, Eg. bg3.w “ship-wrecked man” < \*“drenched person”, LECu.: Afar baggad- “to become wet”, bagg-ed-o “diarrhea”, WCh. \*bg “to pour”, most of which are semantically certainly unrelated.

<sup>29</sup> Affiliated by Ch. Ehret (1995: 89, #31; 2000 MS: 533, #31) with Sem.: Ar. bahħ- “to sprinkle, drizzle”, Eg. (NK) bh “to give birth”, NOM. \*buk- “to sow (i.e.: scatter seed)” < AA \*-bē/ōħʷ- “to spill out in drops, sprinkle”.

<sup>30</sup> K. Nait-Zerrad (DRB 541, FG16 and 551, FK8) affiliated these Berber roots with a velar C<sub>2</sub> to his FY3 root.

<sup>31</sup> G. Takacs (l.c.) was puzzled about the obscure reasons of the vowel disharmony and its etymology merely speculating about an unidentified compound or an unnatural etymon \*balʷak (\*-lʷ-?). Now, instead of either way, the East Chadic match settles the matter by suggesting an original triradical root.

<sup>32</sup> There are at least ca. half a dozen (or maybe even a bit more) of certain cases where the anomalous correspondence Eg. s vs. Sem. \*š is attested (see EDE I 199-201). Thus, it cannot be excluded that -s in Eg. bqs.w too was sprung from a lateral sibilant. In principle, we may assume an alternation of the AA lateral sibilant with \*l- in this root on the NAA analogy of Ar. mal<sup>o</sup>- “troupe, bande, partie” [BK II 1149] ~ Eg. mš<sup>o</sup> “Heer, Truppen” (OK, Wb II 155, 2-19) = “1. Truppe, Heer, 2. Armee, Fußvolk, Infanterie, 3. Arbeitstruppe, Expeditionstruppe” (ÄWb I 570) or Ar. mala<sup>o</sup>a “marcher avec rapidité, d'un pas léger et rapide (se dit d'une chamelle)” [BK II 1149] vs. Ar. maša<sup>o</sup>a “3. marcher, doucement” [BK II 1111] ~ Eg. mš<sup>o</sup>j “1. marschieren (von den Soldaten), reisen, 2. (sich

so also Grapow 1954: 57; GHWb 263) = “spine” (FD 85)<sup>33</sup> ||| NBrb.: just an improbable reflex in Mzg.<sup>34</sup> ||| LECu.: uncertain reflex in Oromo<sup>35</sup>. If the Chado-Egyptian match proves true (even when/if we rightly refute the unreal phantom traces of an SAA  $*\sqrt{bk}$ s “back” in Oromo and Tamazight), we might set up an ancestral (Eg.-Ch.) set of common root varieties  $*\sqrt{bk}\hat{S} \sim *\sqrt{bk}\bar{l}$  “back” [GT]. Moreover, this supposed latter parental root appears to have a strikingly similar triradical variety in Central Chadic with a variation or shift of \*l vs. \*r:

**156.2. CCh.  $*\sqrt{b}Kr$  (???)<sup>36</sup> >  $*\sqrt{b}gl$  “back” [GT],<sup>37</sup> cf. presumably Tera bigırsa [-rs- <  $*ls-$ ] “back” [Meek apud JI, otherwise in Newman 1964] | Higi-Bana buguló-nга “(mein?)**

bewegen (Füße, Überschwemmungswasser), 3. Reise, Marsch” (NK, Wb II 156, 4-12; WD III 57) = “1. zu Fuß gehen, 2. (übertragen) wandeln” (Till 1955: 334, §56) = “to march” (FD 119) = “1. to march, journey, travel, depart, 2. journey, march” (DLE I 245), which might be genetically related to if we assume an interchange of the PSemitic laterals (\*-l- ~ \*-š- > Ar. -l- ~ -š-), cf. Takács (2006a: 113) and EDE III 613-615 and 619-621.

<sup>33</sup> The etymology of this Egyptian anatomical term is even today mysterious, full of stubborn puzzles in spite of numerous alternatives and attempts (critically surveyed in EDE II 331-332): (1) the CCh. root examined above. (2) Sem.: Akk. (SynL) baqašu “etwa: breit”, (Jb) baqāšu “etwa: breit sein (i.a. vom Rücken und Stirn)”, (aAK/AB) buqqusum “sehr breit” [AHW 104, 139] = (Standard Bab.) baqāšu “to become enlarged (?)”, protruding (?), cf. buqqusū (adj. describing a characteristic bodily trait, occurs always as a personal name in OAkk., OBab.), cf. buqāšu (subst., meaning unknown, occurs as a personal name in OAkk.) [CAD b 99, 325, 323, resp.?] For the supposed Ugaritic cognate of the Akk. term cf. Watson 1993: 214. (3) In spite of its homophony, the isogloss of SCu.: Qwadza be<sup>es</sup>-iko [-?- regular <-?/k/b/-] (pl. of belendayo) “shoulders” [Ehret 1980: 142, §IA.74 with a semantically false derivation] ||| CCh.: PMandara \*bagāža “shoulder” [GT] (Mandara: Wolff 1983: 224), for which cf. perhaps Eg. bgz.w “als Körperteil des Sternbildes ‘Riese’” (NK, Wb I 483, 1) = bgz.t “\*Hüfte (Teil des Sternbilds ‘Riese’ in den ramessidischen Sternuhren, zwischen Oberschenkel und Brust)” (GHWb 264)? Act. \*bqs.(t/w)? Probably to be distinguished from LEg. bgz “Kehle (?)” (GR, Wb I 483, 2)? Perhaps the SCu.-CCh. root was of biliteral origin, cf. NBrb.  $*\sqrt{bg}y$  (?) [GT]: Tamazight ta-bužžu-t “biceps (muscles)”, a-bužž “(avant-)bras”, perhaps also ta-bža “1. étui à collyre, 2. flûte (en roseau)” [DRB 43, BJ3] ||| WCh.: Bole-Tangale \*baka “shoulder” [Schuh 1984: 212]. As areal parallel cf. PBantu \*-bègà “shoulder” [Guthrie 1971: 118]. (4) The equation of Eg. bqs.w with LECu.: Oromo buqus-ē “vagina” [Gragg 1982: 69] = buquš-ē [Hudson 1989: 161] is perhaps plausible. In principle, a semantic development “vagina” < \*“bottom” < \*“back” should not be ruled out. (5) G. von der Gabelentz (1894: 160-161) affiliated Eg. begsu (sic) with Basque beso “Arm”, EBrb.: Ghadames u-fus, NBrb.: Qabyle a-fus and SBrb.: Twareg a-füs “Hand” and Twareg te-bbis-t “Handvoll”, which is certainly false. (6) C.T. Hodge (1989: 14; 1990: 653; 1992: 15; 1994: 532) saw in Eg. bqs.w an alleged \*b- “place prefix” attached to Eg. qs “bone”. Unconvincing, since no convincing evidence was offered for that kind of b- prefix, let alone that one does not necessarily associate just “back” as the “place of bone”. (6) Ch. Ehret (1997 MS: 8, #1052) compared Eg. bqs.w “spine (?)” to LECu.: Oromo boqq-ō “neck, back of the neck”, derived from AA  $*\sqrt{buk}$ - “to bend (body)” based on HECu.  $*\sqrt{bo}\bar{o}$ - “to bend” [Ehret] ||| POm.  $*\sqrt{bok}$ - “knee” [Ehret] ||| WCh.: Ngizim bəgbók “side just above hipbone and below ribs” [Schuh 1981: 15].

<sup>34</sup> Cf. Mzg. a-baqis “coup donné avec la main ouverte sur le dos de l’autre main” [Taïfi 1991: 24], where, however, the basic sense was connected with hitting and not the back, since K. Naït-Zerrad (DRB 88) convincingly affiliated it with NBrb.: Qabyle beqqes “gifler, souffleter (coups plus modérés que beqqed)”, i-beqqis “gifle” [Dallet 1982: 35].

<sup>35</sup> Cf. Oromo buqus-ē “vagina” [Gragg 1982: 69] = buquš-ē “vagina” [Hudson 1989: 161] = buqqus-ā “vagina (usually polite and of female children)” [Bitima 2000: 68]. In principle, a semantic development “vagina” < \*“bottom” < \*“back” should not be ruled out, but one would, of course, need further (LE)Cu. data for this purpose.

<sup>36</sup> H. Jungraithmayr and D. Ibriszimow (l.c.) derived the Tera and Masa parallels from their common Ch.  $*k\bar{r}$  “back”, which seems to be challenged by phonological difficulties (e.g., Masa -l vs. PCh. \*-r, Tera & Masa -g- vs. PCh. \*k-), also by the initial b- in CCh. (hardly a prefix), and by the comparison with Eg. bqs.w proposed here.

<sup>37</sup> Where the third consonant might be a complement attached to the same biconsonantal PAA root (or its variety) that might be present in the rest of the biconsonantal parallels.

Rücken” [Lukas 1937: 130] | PMusgu \*bUgol “back” [GT]: Musgu \*bogól, pl. \*bogolakái “Buckel”, Lukas: “zu erschließen aus” že-bogól, fem. ebenso oder že-bugulíí “bucklig” (Krause) [Lukas 1941: 48], Mbara bùgól “derrière” [TSL 1986: 255] | PMasa \*vbg ~ \*vbk > \*vbl “back” [GT]: Masa búgol “dos” [Mouchet] = búgol-lá “Rücken” [Jng. 1971-2, so also in JI] = būkol [bùgòllá] “1. le dos, 2. l’arrière (p.ex. de la case), 3. derrière, 4. après, 5. [bùgòltá] ensuite” [Caïtucoli 1983: 51-52], Masa-Bongor búgol-lá “dos” [Jng. 1971/2 MS: 71], Gizey/Wina búgol, Masa búgol ~ bògol, Ham bògol, Lew bògol, Marba búgol “derrière” [Ajello et al. 2001: 20], Ham, Lew bògol, Marba búgol “derrière” [Ajello et al. 2001: 6], Gizey/Wina búgol, Masa bògol, Ham bògol “dos, derrière” [Ajello et al. 2001: 21], Lame bákír “revers, dos” [Sachnine 1982: 287], perhaps also (via metathesis???) Zime-Dari kà?bérò? “revers (tissu)” [Cooper 1984: 11] (CCh.: JI 1994 II 7).

The initial \*b- in these reflexes apparently testifies to a non-glottal C<sub>2</sub> whose plain voiced/-less velar left the Anlaut also untouched without the obligatory transposition of glottalization. In addition, further biliteral parallels seem to speak for analyzing the third consonant in as a C<sub>3</sub> \*-r<sup>38</sup> complement whereby the primary PAA root was extended.

**156.3. P<sup>2</sup>/SAA \*vbk ~ rare variety \*vk “1. thigh, 2. hind parts, 3. tail (?)” [GT]<sup>39</sup> > Eg.: dubious, no direct reflex<sup>40</sup> ||| NBrb.: perhaps Shilh ta-baqqu-t “queue”, a-baqqu “verge”, var. (t)a-bakku-(t) “petite queue d’animal” [DRB 86, BQ9 and 48, BK21, resp.: both isolated in Berber] ||| NOm. \*bU/ʌk- > \*bunk- (via epenthetic nasal) “1. thigh, 2. buttocks” [GT]: POmeto \*bunk- “thigh” [GT]: Gamu bunk- “buttocks” [Moreno in Bender 2003: 315, #10] | Ganjule ‘búga “thigh” [Siebert & Hoeft] and Zayse ‘buŋka “thigh” [Siebert & Hoeft] = buŋk- “thigh” [Hayward in Bender 2003: 89, #77], Zergulla búnka “upper leg” [Bender 2003: 87, #55b] (isolated in SEOmeto: Bender 2003: 336, #100) | Gimirra \*bak “buttocks” [GT]: Benesho bak [Breeze] = bəq’ [Fleming], She bak [Montandon], all signifying “buttocks” (Gimirra: Bender 2003: 339, #10) | Dizoid \*bok/g- (?) “thigh” [Bender 2003: 255, #A100]: in fact, Dizi bʌgʌn [Fleming], Sheko bòka [Aklilu] = boka [Fleming] “thigh” (isolated in Dizoid apud Bender 2003: 352, #100) ||| WCh.: perhaps Pero püká [< \*buk- with irregular p- < \*b-???] “thigh (animal)” [Frj. 1985: 47].**

**156.1. PAA \*vbg(w) “1. anus, 2. back” [GT] > SBrb.: (?) EWlmd.-Ayr bágaw “être injecté par l’anus (liquide servant de clystère)”, te-bágaw-t “tube servant à injecter un liquide par l’anus, clysoir” [PAM 1998: 6] ||| LECu.: Baiso bʌga “back” [Fleming 1964: 46] = beget**

<sup>38</sup> Which is challenged by H. Jungraithmayr’s (JS 1981: 32A; JI 1994 I 3A) hypothesis on its derivation from the biradical PCh. \*-kr “back” by a prefix \*b- of unknown signification. Still, much likelier appears the case of C<sub>3</sub> ext. \*-r here, this latter here being not uncommon as a fossilized nominal class marker in some other segment of the AA anatomical terminology, cf. Takács 1994; 1995: 101, #2; 1997: 247.

<sup>39</sup> One wonders if the same root is retained by NBrb.: Nefusa te-bga “tibia” [DRB 33, BG18] ||| WCh.: (???) Gerka bak “leg”, bok “foot” [Ftp. 1911: 216, 208]. G. Takács (2004: 18) assumed Gerka gbák (so, gb-) [Jng.] to be a misrecorded form of an irregular reflex of AS \*kʷak ~ \*kʷak “leg etc.”. Is Gerka b- [Ftp.] < \*gb- < \*gʷ- < \*kʷ- to be assumed just like in Gerka purrum “blacksmith” [Ftp. 1911: 215] < AS \*kʷalam ~ \*kʷolom “to forge iron”, where the shift of Gerka p- < \*kʷ- via \*kp- (?)?

<sup>40</sup> It would be tempting, of course, to segment in Eg. bqs.w “Rückenwirbel, Wirbelsäule(nkanal)” (PT, Wb I 480, 8-12) = “spine” (FD 85) the PAA root \*vbk above, but we know of no nominal class marker \*-s whatsoever that might be identified with its C<sub>3</sub>.

“back” [Siebert 1994: 11] || WCh.: unlikely reflex in Ngizim<sup>41</sup> || ECh.: Modgel bégú-am “mein Arsch” [Lukas 1937: 96] | Mubi bùk (m), pl. bòogàk “1. reins, 2. derrière” [Jng. 1990 MS: 6]. Cf. EDE II 331.

### Mubi-Toram lexemes with \*b- + sonants

**157. Kofa búnjgúm** (m), pl. búnjgàm “baboon” [Jng. 1977 MS: 12, #291] (GT: isolated in MT?) || WCh. \*bang(ay)- or \*bangy- (?) “baboon” [GT]: Ngamo bàngøy “baboon” [Kraft], Kirfi bàngó “baboon” [Schuh 1978: 139], Tangale pàŋjùm [p- < \*b- poss.] “monkey” [Kidda 1985: 210, #317], Pero pyəŋgàn [p- regular < \*b-?] “monkey” [Kraft] | Bade bângê “baboon” [Kraft] = bângê (sic: b-) [Stolbova], Ngizim bángái, pl. bángágìn “anubis baboon” [Schuh 1981: 21] = bangèi “baboon” [Kraft] = bangží “monkey” [Stolbova] (WCh.: Kraft 1981, #163-#164). This Chadic stem seems for me to be isolated in the whole AA family.<sup>42</sup> One might therefore suppose perhaps a remote loaning from Kanuri bungwoi “black dog-faced baboon” [Schuh] or its ancestral etymon.

**158. Masmaje ɓarè** “tige d'épis de mil” [Alio 2004: 280, #30] || SCu.: Alagwa bar-is-(caus.) “to grow (of plants)” [Ehret 1980: 320, #1]<sup>43</sup> || Eth.-Sem. \*√bhr: Tna. bəhar, bahar

<sup>41</sup> One may be perhaps tempted to compare here Ngizim bəgbók “side just above hipbone and below ribs” [Schuh 1981: 15] also, but it seems better related to a distinct root, namely LECu.: Somali bog “flank”, Oromo buke “flank” (LECu.: Zaborski 1975: 327) | HECu.: Burji and Hadiya bakko “beside” (HECu.: Sasse 1982: 38).

<sup>42</sup> As its third radical \*-g can hardly be treated here as a root extension for the time being, it seems to represent a root distinct from PCh. \*√bn (prob. \*bin-) “monkey” [GT]: WCh.: Siri bini [Skinner 1977: 11] || CCh.: Falí beno [Strümpell 1922-3: 133] | Gude móbin [OS], Bachama mabwén [OS] | Banana vına [Kraft], Musey fina [Kraft] (CCh.: Kraft 1981: #163). N. Skinner (1977: 11), O.V. Stolbova (1987: 249), and V.É. Orel & O.V. Stolbova (OS 1992: 183; Orel 1993: 43; HSED #335) equated some of these parallels with Eg. bnw “Pavian” (BD, Wb I 458, 6) = bnw “ein Pavian” (GHWb 253). Whether this Chado-Egyptian isogloss has something to do also with PCh. \*bUm- “baboon” [GT] (?) > WCh.: Geruma bomi “baboon” [Gowers apud Schuh 1978: 139] | NBauchi: Pa'a búŋ “monkey” [Skinner] = bún, pl. búnánì “baboon” [M. Skinner 1979: 168], Kariya bum “baboon” (NBauchi: Skinner 1977: 11) | SBauchi: Polchi vuúm “baboon” [Kraft] || CCh.: Gudu bœ:m “baboon” [Kraft] (W-CCh.: Kraft 1981: #164) || ECh.: (???) Dangla-Migama \*?amba?am [GT]: EDangla àmbáam “chimpanzé” [Dbr.-Mnt. 1973: 12], Bidiya ?àmbà?áám (m) “singe sp.” [AJ 1989: 52], is uncertain. N. Skinner (l.c.) and O.V. Stolbova (l.c.) agree in equating Pa'a búŋ and Kariya bum with Siri bini “monkey” above (serived from Stolbova from her NBauchi \*bAni with \*-n-), which seem to me to better represent two separate roots. It would be equally difficult to suppose a process \*bVrVm > \*bVm in these languages. C.T. Hodge (1968: 26) and V. Blažek (1984: 443-444) connected Eg. bnw and PCh. \*√bn with the reflexes of PCh. \*√bd “monkey” and PCh. \*√br “monkey”, which are unrelated (cf. the entries of Eg. b3bj and bntj in EDE II 70-73 and 235-237, resp.). In Chadic studies too, these apparently distinct roots are usually derived from the very same source, although the phonological anomalies are not (cannot be) explained. In spite of H.G. Mukarovský (1987: 258), PCh. \*√bn seems to be unrelated to LECu.: Somali wánn- “Colobus gueresa Riipp., eine Affengattung, deren Schwanz als Zierde des Schildes gebraucht wird” [Reinisch 1902: 379] | Oromo wenni (w- rendered as ū-, i.e., ū-) “scimmia agilissima che vive sulle cime dei grandi alberi (per terre sembra perdere la sua agilità, la sua pelliccia è bellissima e serve come ornamento agli uomini d'armi)” [da Thiene 1939: 334] = wēnnī “monkey (= gureza of Amh.)” [Gragg 1982: 403] = wani ~ weni “Colobus monkey” [Mukarovský] | HECu.: Burji woyn-ē “Colobus monkey” [Sasse 1982: 191].

<sup>43</sup> Derived by Ch. Ehret (l.c.) from SCu. \*bad- “much, many” based solely on this single form and its comparison with LECu.: Somali badan, badi- “to be many”.

“grand, fort”, Tigre bāharat “qui poussent, germent” (ES: DRS 49, BHR1 with semantically vague parallels) < PAA \*<sup>v</sup>b(h)r “to grow (primarily of a plant?)” [GT].

**159. MT \*bēr-** “slave” [GT]: Mubi bēr (m), pl. bērē “Sklave” [Lukas 1937: 180] = bēr (m), pl. bōrūr “éslave” [Jng. 1990 MS: 6], Masmaje bērungo “esclave” [Alio 2004: 280, #31], Birgit bērnā (m), pl. bērnéy “esclave” [Jng. 2004: 351], Kofa bērró (m), bērré (f), pl. bērrán “slave” [Jng. 1977 MS: 15, #388] | DM \*bērn- “slave” [GT]: WDangla bērnē “esclave” [Fédry 1971: 106], EDangla bērrē [bērrē] (m) “l'esclave, l'enfant abandonné que l'on prende en charge” [Dbr.-Mnt. 1973: 58], Korlongo bērre “esclave” [Fédry], Bidiya bērno (m), bērna (f), pl. bērna “esclave”, bēnēw (berniwí, bēnìwej), pl. bēnēw (bernèwí, bēnèewe) “asservir” [AJ 1989: 62] < ECh. \*bēr- “slave” [GT] || WCh.: PGoemay \*bār “to salute with humility” [GT]: Goemay bāar “to show obedience” [Sirlinger 1937: 9] = bāar “to salute, prostrate” [Hellwig 2000 MS: 2] (Takacs 2004: 28: isolated in AS) || Eg. <sup>v</sup>b3 [-3 regular < \*-r] “jemanden bedienen” (PT, Wb I 177, 4) || Sem.: Ar. <sup>v</sup>abira I “1. puiser de l'instruction dans un exemple, dans qqch. qui offre des exemples”, VIII “1. considérer avec attention, observer, 3. regarder qqch. comme un exemple dans lequel on doit puiser un enseignement, s'instruire par des exemples, par ce qui arrive à d'autres, 4. examiner avec attention et calculer, supputer, 5. considérer, respecter qqn., 6. avoir égard à qqch., faire attention”, VIII au passif: “1. être considéré, respecté, 2. être l'objet de l'attention”, X “4. s'instruire par des exemples, par ce qui arrive aux autres” [BK II 152-153] < PAA \*<sup>v</sup>br “1. to obey (an instruction), 2. serve so.” [GT].<sup>44</sup> There are further parallels with plain b- tempting at the first glance to be conceived as cognate, which may well turn out to be misleading.<sup>45</sup>

**160. MT \*bir- ~ \*bir-** “to fly” [GT]: Mubi bīr (bēr, bīrrā) “voler (oiseau)” [Jng. 1990 MS: 5], Birgit bērī (bērā, bērō) “voler” [Jng. 2004: 351], Masmaje bīreeti “concourir” [Alio 2004: 280, #32] | Bidiya bīrbīrīny “idéo. de tournoyer dans l'air” [AJ 1989: 62]: < ECh. \*bir- “to fly” [GT] || NSem. \*<sup>v</sup>br “to fly up” [GT]: Akk. abru “Flügel, Flosse” [AHW 7] || Ug. <sup>v</sup>br “fliegen (?)” [WUS], Hbr. <sup>v</sup>br hifil “sich emporschwingen (v. Habicht)” [GB] (NSem.: GB 7; DRS 5; WUS #33) < PAA \*<sup>v</sup>br “to fly” [GT]. The initial ECh. \*b- issues regularly from the cluster of \*?**b**-. This PAA trilateral root was extended by \*?- from a biliteral root, which is much more widespread, cp.:

<sup>44</sup> Perhaps a remote PAA variety (via rhotacism, so widespread in SAA) to the PAA etymon of Sem. \*<sup>v</sup>abd- “slave” and \*<sup>v</sup>bd “to work” (denom.?) [OS] || CCh.: Hitkala vēḍā “Sklave” [Lukas 1964: 109] etc.? Sem.-CCh.: HSed 232, #1029.

<sup>45</sup> E.g., it would be difficult to directly identify the above-listed Chadic forms displaying an old \*b- with WCh.: Hausa bārā “servant” [Abraham 1962: 77], which N. Skinner (1996: 16) related, along with an evident areal parallel like Mande bara “work, domestic service”, also to Eg. b3k “Diener” (OK, Wb I 429-430). This latter theory is certainly untenable as it offers no explanation for the nature Eg. -k. On the other hand, strikingly similar forms are used in the Ethiopian area like Agaw: Qwara bārā and Hamir bārā “Knecht” [Reinisch 1885: 43] || LEcu.: Somali-Jabarti bāra “slave” [Reinisch 1904: 55] || ES: Gurage barya, Amhara barya “slave” (ES: Appleyard 1977: 53/95; Leslau 1979 III 157). But, as, for instance, W. Leslau (l.c.) and D. Appleyard (l.c.) have shown, the Ethio-Semitic term issues from the name of the ethnic group Barya, a people in NWEthiopia speaking East Sudanic.

**160.1. PAA** \*√**br** “to jump, 2. fly, 3. flee” [GT] > ES √**brr** “to fly” (from Cu.?) [GT]: Geez barra “to fly, run fast” [Leslau], Amh. bärräärä “to fly, run away” [Leslau] (ES-Cu.: Leslau 1987: 107) and ES √**bry** “to flee” [GT]: Geez baraya “to bolt and flee (mount)” [Leslau], Amh. bäräyyä “to flee” [Leslau] = “s’envir, épouvanté” [DRS 82] (ES: Leslau 1987: 108) vs. MSA √**brw**: Jibbali ebré “to jump high and succeed, etc.”, Mehri həbrō “i.a. to jump (from x to y)” (MSA: Johnstone 1981: 28; 1987: 54) || Bed. bir ~ bīr “to fly”, ambūr ~ anbūr “wing” [Reinisch 1895: 17, 21, 50] || NAgaw: Khamir bir- “fliegen” [Reinisch 1884: 349] | SAgaw: Awngi beräru “to fly” [Leslau] = bir- “to fly” [HCVA] = berer-əŋ “to fly” [HSED] || LECu.: Saho -ibrir- “to fly” [Sasse] | Oromo barar- “to fly” [Sasse, Lamberti] | HECu. \*barar- “to fly” [Hudson 1989: 406] = \*burr-/\*birr- [GT] (ECu.: Sasse 1982: 44; Cu.: LS 1997: 253-354) || WCh.: Hausa bírááři “1. jumping, 2. surging forward to get at sg.”, cf. bùrbùrníyáá “gambolling with joy” [Abraham 1962: 102, 121] || CCh.: Musgu bárá “(s’en)-voler” [Mouchet 1950: 30], Vulum bìrì “voler (oiseau)” [Tourneux 1978a: 288; 1978b: 93] | Musgoy mbir “(s’en)voler” [Mouchet], Daba mbir “1. voler, 2. s’envoler, sauter” [Mouchet 1966: 136] = mbìr “to jump” [Lienhard-Gieger], Kola ...mbír... “to jump” [Schubert] || ECh.: Mobu bóré “sauter” & Ngam bré “voler (pour un oiseau)” [Jng. apud Lenssen 1984: 63] | EDangla béré “sauter (en dansant)” [Dbr.-Mnt. 1973: 42] = béré “(beim Tanzen) springen” [Ebobisse 1979: 127; 1987: 94], Bidiya ber “sauter” [AJ 1989: 58] | Mubi bír “voler (oiseau)” [Jng. 1990 MS: 5], Birgit bérí “voler” [Jng. 1973 MS] (Ch.: JI 1994 II: 211). For the AA comparison see also Mukarovský 1966: 19, #64; 1987: 226; SISAJa I #112; HCVA II #119; HSED #219 & #291; Takács 1999: 44.

**160.2. PAA** \*√**br** “to jump” [GT]: Sem.: MSA √**brw** [Johnstone]: Jibbali ebré “to jump high and succeed, etc.”, Mehri həbrō “i.a. to jump (from x to y)” (MSA: Johnstone 1981: 28; 1987: 54) || (?) Eg. b3b3 “Verbum in Wortspiel mit der Körnerfrucht b3b3.t (statt des alten nb3b3)” (NK, Wb I 418, 13) = “to tremble, flutter (younger var. of PT nb3b3)” (Ward 1978: 28) = “sauter, tressauter (autre forme du nb3b3)” (AL 78.1228) = “\*zittern, sich hin und her bewegen, aufspringen” (GHWb 240) || WCh.: Hausa bírááři “1. jumping, 2. surging forward to get at sg.”, cf. bùrbùrníyáá “gambolling with joy” [Abraham 1962: 102, 121] || CCh.: Daba mbir “1. voler, 2. s’envoler, sauter” [Mouchet 1966: 136] = mbìr “to jump” [Lienhard & Giger], Kola ...mbír... “to jump” [Schubert] | Musgu bárá “to jump” [Mouchet] || ECh.: Mobu bóré “sauter” [Jng. apud Lenssen 1984: 63] | DM \*ber- “to spring” [GT] > EDangla béré “sauter en dansant” [Dbr.-Mnt. 1973: 42] = béré “(beim Tanzen) springen” [Ebobisse 1979: 127; 1987: 94], Bidiya ber (berí, bereŋ) “1. apparaître (lune), 2. sauter”, pl. berèw (berèewí, berèewen) “sautiller, danser”, beréwò (f) “danse” [AJ 1989: 58] (Ch.: JI 1994 II 211). For these and further varieties with a voiceless Anlaut of this waste root family cf. EDE II 65 and 378-384, resp.

**161. Mubi bìrkí** (f), pl. bìràayàk “gazelle cobe defassa (ar. nyalat)” [Jng. 1990 MS: 7] | DM \*barg- “antilope” [GT]: Bidiya bárgà (f) “koudou, antilope rayée (ar. nyalat)” [AJ 1989: 62], Migama bârgú (m), bàngá (f), pl. bârgée “antilope-cheval (koudou)” [JA 1992: 73]: < ECh.

\*bVrK- < \*\*bVrk- “antilope” [GT] ||| Sem.: no certain cognates<sup>46</sup> ||| NBrb.: only etymologically unrelated look-alikes in Tamazight.<sup>47</sup>

**162. PMubi \*b̥eriyò** “leaf” [GT]: Mubi b̥eriyò (m), pl. b̥èrè “Blatt” [Lukas 1937: 180] = \*b̥eriyò “leaf” [Doornbos & Bender] = b̥eriyò (m), pl. b̥èrè “feuille (pl. papier monnaie)” [Jng. 1990 MS: 6], Minjile \*berriò (sic: plain b-) “leaf” [Doornbos & Bender], Kajakse reflex obscure<sup>48</sup> (Mubi: Doornbos & Bender 1983: 77, #46). Its \*b̥- suggests a lost l/pharyngeal in the ancestral root (either AA \*v̥Hbr or \*v̥brH), whose reflex in some other AA branch has not yet been found though perhaps except for Semitic if we assume here both some metonymy between flora vs. fauna and a metathesis, cf. Sem. \*v̥br > Ar. v̥br: ʕabīr- “2. bien fourni (se dit, par ex., d'une flèche garnie de beaucoup de plumes, ou d'un mouton bien fourni de laine pour n'avoir pas été tondu pendant d'une année)”, mu-ʕbar- “1. bien fourni

<sup>46</sup> Ar. baraq-, pl. ʔabrāq-, bi/urqān- “1. bâlier, 2. agneau” [BK I 114] = “a lamb (syn. of ɬamal-)” [Lane 190c], for which so far at least three different etymologies have been offered, is clearly out of the question in the context of this etymological entry as, in Arabic lexicography, it has been rendered, even ambiguously, either as not a genuine Arabic zoonym or as not a primary noun. Thus, both standard lexicons speak of a Persian loan (BK l.c.; Lane l.c. “a Persian word, arabicized, originally ڦ”). As Iranist Prof. Kinga Paraskiewicz (Jagellonian University, Cracow) has confirmed for me (in her kind p.c. on the 21<sup>st</sup> and 22<sup>nd</sup> Sept. 2022), New Persian ڦ barra and bara “1. a lamb, 2. the sign Aries; 3. a fawn” [Steingass 1892: 181] = barra ڦ “1. lamb, ram; 2. (astr.) Aries” [MacKenzie 1971: 87] < Middle Persian warrag (Aramaic ideogram KNNA; Pahlavi script wlkl / Manichaean script writing) < Proto-Iranian \*varn-aka-, where MPersian warrag became barrag at the beginning of the Classical Modern Persian period (9-11 cent. AD), after the Arabic conquest of Iran. Initial w- > b- was regular. The Arabs did not know the velar g so they pronounced it as uvular q or sometimes alveolar j (dʒ). New Persian final -a-e stems < \*-ag. Henceforth, one might reconstruct the borrowing from the transgression of MPersian warrag > Class. Persian barrag into Ar. baraq. The direction of borrowing, beside the *lautgeschichtliche* arguments above, appears to be secured by the fact that the Arabic word has no cognates among the Semitic zoonyms, so no ancestral etymon can be assumed, whereas the Iranian stem originates from Proto-Indo-European \*urh₁en- “ram”, whence also Sanskrit úraṇa-, Central Kurdish بَرْ بَرْ berh, Northern Kurdish berh, Zazaki verek, Ancient Greek ἄρπιν (arén) and Old Armenian quñu gařn derive (IEW I 1170). On the other hand of Arabic lexicography, however, DAFA 562 quotes solely Ar. √brq IV “sacrifier une brebis noire et blanche (to sacrifice a ewe with black and white fleece)” as a denominative root eventually derived from a certain √brq B carrying the “notion de base ’éclat (brilliance), opposition de deux ou plusieurs couleurs”. In addition, the Arabic term was affiliated in HSED 57 with an alleged WCh. \*barVk- (whose \*k is certainly false as nothing reflects it in the one single reflex) > Bole barke “goat” || ECh. \*birVk- > Bidiya birkì “bull” || SBrb.: Ahaggar a-barkaw “calf” || Guanche a-baraki “cattle” < Brb. \*barak-(with an irregular \*-k-) < AA \*barak- “ram, goat, calf”. But there is hardly any support of \*-k in this root, e.g., in East Chadic, we are certainly dealing with plain \*b- (and not an implosive \*b̥-) indicating a non-glottalized PAA \*-k, cf. DM \*bErk- “beef” [GT]: WDangla bérkì (m) “bovidé mâle, boeuf, taureau” [Fédry 1971: 86], EDangla bérkì (m), bérkā (f), pl. bárkày “1. le boeuf, le taureau, bovidé mâle (castré ou non), 2. la vache, la génisse (qui n'a pas encore porté): bovidé femelle, 3. les boeufs, les bovidés, les bêtes (en général)” [Dbr.-Mnt. 1973: 43], cf. also EDangla birkinnē (m) “le fumier, la bouse de vache sèche” [Dbr.-Mnt. 1973: 45], Bidiya birkì (m), birkà (f), pl. gámàñ “1. (m) taureau, 2. (f) vache, 3. (pl.) troupeau, bétail” [AJ 1989: 58] | Ubi bòrgù “vache” [Alio 2004: 268, #44].

<sup>47</sup> Tamazight tu-berrey-t, var. tu-berreh-t, pl. tu-berryi “brebis à tête noire” [Taifi 1991: 29; DRB 116: isolated in Brb.] vs. Tamazight tu-berqiy-t, pl. ti-berqiy-in “brebis à la tête rougeâtre”, in Izayan: “brebis dont les yeux, les oreilles et le museau sont tachetés de noir” [Taifi 1991: 32; DRB 118: isolated in Brb.] being presumably just secondary zoonyms derived from a root variety akin to the almost homophonous Berber root for “black” (surveyed in EDE II 84-85 and EAAN I 58, #238). Cf. also Ar. √brq IV “sacrifier une brebis noire et blanche (to sacrifice a ewe with black and white fleece)” [DAFA 562].

<sup>48</sup> Cf. (???) Kajakse \*fiyayò “leaf” [Doornbos & Bender], whose cognacy seems at this moment *lautgeschichtlich* dubious.

de laine, de poil (mouton, chameau), spécialem. qui n'a pas été tondu pendant une année (mouton), 2. bien garni de plumes (se dit d'une flèche), 3. qui a presque atteint la puberté et qui n'est pas encore circoncis (jeune homme)", also "ubr- "qui n'est tondu qu'après d'une année (mouton)" [BK II 154-155] and/or ES \* $\sqrt{br}$  > Geez bər<sup>o</sup> "reed (pen), branch of a chandelier, stalk, stem of fruit, stubble" [Leslau] = "calame, roseau à écrire, plume" [DRS], Tigre bərə<sup>o</sup> "reed (pen)" [Leslau] = Tigre bər<sup>o</sup> and Tigrinya bər<sup>o</sup>i "calame, roseau à écrire, plume" [DRS], Amharic bər ~ bə?ər "stubble, stalk of wheat, reed pen" [Leslau] = bərr "1. tige, 2. plume à écrire" [DRS] (ES: DRS 85, br<sup>o</sup>3; Leslau 1987: 101-102). But the underlying original biradical root is better known:

**162.1. P?/SAA \* $\sqrt{br}$**  "1. leaves, foliage, 2. (by extension) tree" [GT]: (???) Eg. b3.t (if its -3- < \*-r-)⁴⁹ "1. Busch, Gebüsch, 2. Büschel (d.h. mehrere Zweige oder Halme) verschiedener Pflanzen" (OK, Wb I 416, 5-10) = "1. bush, 2. wisp of corn" (FD 77) → Dem. b "Busch, Büschel" (DG 109) → Coptic (SLBF) ⲃω, (A) ⲚΟΥ (f) "Baum" (KHW 20) Ⅲ (?) NBrb. \* $\sqrt{br}br$  "to have (or be covered by?) leaves or foliage" [GT]⁵⁰ > Mzab bberbər "couvrir entièrement avec une couverture, des feuilles" [Delheure 1984: 10] = bberber [DRB] | Qabyle bberb·er ~ bberber "2. être feuillu, avoir belle végétation", a-berbur "feuillage de courge" [Dallet 1982: 36] Ⅲ NOm.: (???) Yemsa \*bur/d-u "bush, forest" [GT]:⁵¹ Yemsa bur/du [Cerulli] = bur'ù [Lamberti] (Yemsa: Bender 2003: 338, #9) Ⅲ WCh.: presumably Pero púrō [p < \*b poss.]⁵² "tree", cf. púrē "grass for roofing" [Frj. 1985: 48] || CCh.: Fali biri "Baum" [Lukas 1937: 110] | Masa baar "Baumwolle" [Lukas 1937: 98]. Cf. EDE II 17; EAAN I 47-48, #180.

**163. MT \*bale** "arrow" [GT]: Kofa bəlé (f), pl. bálàn "arrow" [Jng. 1977 MS: 7, #138], Toram bəle "flèche" [Alio 2004: 253, #74] | Bidiya bállà (f), pl. bəlál "flèche", bəalò ~ bəlò

<sup>49</sup> Unless it reflects in fact \*bl.t, for which cf. EDE II 16.

<sup>50</sup> It is, however, apparently rendered in Berber lexicography from a basic root sense "to be covered" (cf. DRB 91), whence its relatedness may only be conceived from a basic meaning \*"to be covered by foliage".

<sup>51</sup> Its connection to NOm.: Mocha dimbārō "bush, forest" [Leslau] (isolated in Kefoid: Bender 2003: 338, #9) is more than obscure. Alternatively and most likely, NOm.: Yemsa \*buq-u "bush, forest" [GT], provided its C<sub>2</sub> stemmed from an AA glottal affricate, may be equated with NBrb.: Shilh ta-buda "jonc de marais" | Qabyle ta-buda "jonc des marais" | Mzg. (Maroc Central) a-buda "esp. de roseau avec lequel on fait des cabanes et des treillis" (NBrb.: DRB 29, bd15) Ⅲ Sem. \* $\sqrt{bw}$ ṣ: esp. Ar. būṣ- (coll.) "roseaux" [DRS] = "tiges sèches du maïs, dont on fait des grillages pour les balcons et les jardins" [BK I 178] = (coll.) "1. roseau(x) (d')Égypte dont on fait des calames, des claires, etc.) / (Egyptian) reeds (gen., from which pens, hurdles etc. are made), 2. inflorescence (d'une plante herbacée)?, 3. B:ousse, cœur d'une touffe de sparte / shoot, heart of a tuft of esparto grass, 4. LPM: inflorescence de l'alfa / inflorescence of alfa-grass" [DAFA 916] < PAA \*buç/ç- "reed thicket (?)" [GT].

<sup>52</sup> For the occasional correspondence of Pero p < AA \*b-, cf. Pero púrūm "knee" [Frj. 1985: 48] < AA \* $\sqrt{br}$  "knee" [GT]. Or cf. Pero párá "hunt (n.)" [Frj. 1985: 44] and Tangale para "hunt(ing)" [Jng. 1991: 129] = párá "1. to look for, 2. hunt" [Kidda 1985: 218, #75] identical with WCh.: Hausa fáráw-tà "to hunt (an animal)" [Abraham 1962: 253] | Bokkos faar "1. suchen, 2. jagen" [Jng.], Daffo-Butura faar "jagen" [Jng.] (Ron: Jng. 1966: 172; 1970: 141) || ECh.: Mubi fáràngàté "to hunt" [Jng.] (Ch.: JI 1994 II 198-199) vs. Dem. jr brbr "jagen" (DG 119: 3) Ⅲ SAgaw: Awngi barabar- "to search" [Hetzron (?) in Ehret 1997 MS: 26, #1121] || LECu.: Boni bér-e? "fort-jagen" [Heine 1977: 287] Ⅲ WCh.: Gwandara bira "2. to look for" [Matsushita 1972: 26] | Bole bárà "hunting" [Ibriszimow & Gimba 1994: 128], Kwami bárà "Jagd" [Leger 1993: 170] | Ngizim bárà "hunting", bárú "to hunt" [Schuh 1981: 21-22] || CCh.: Chibak bárà "1. suchen, 2. jagen, 3. wollen" [Hoffmann 1955: 133]. Cf. further EDE II 264.

(m), pl. ɓaalè ~ ɓalè “arc” [AJ 1989: 61] | Sarwa ɓálāw, Gadang ɓälū “lance (de guerre)” (Somray gr.: JI 1993 MS: 8, #144). The history of ECh. \*bal- “1. arrow, 2. lance” [GT] underlying these forms has not yet been comprehensively mapped in all its details: this is what an attempt is made for below. Note that, in principle, Ch. \*b is regular < a combination of \*c/\*h/\*?/\*h + \*b as radicals or, alternatively, may also derive from a prenasalized \*mb-.

**163.1.** The Chadic word exists with a C<sub>2</sub> \*-r also, which may either be due to a reason lying in the historical phonology (not yet cleared) or cf. CCh.: Munjuk-Puss ɓre (m) “pointe de flèche” [Tourneux 1991: 79] | Masa \*ɓaraw ~ \*ɓur “arrow-bow” [GT]: Masa-Bongor ɓàràu-ná “arc + carquois + flèche” [Jng. 1971/2 MS: 81], Gizey/Wina gú ɓùr, Masa ɓàràw, Ham ɓòròò, Musey gúmbùrà “arc” [Ajello et al. 2001: 6], cf. Gizey/Wina zìy ɓùr, Masa zì ɓàràw, Ham zì ɓòròò “carquois” (lit. “house of arrow”, cf. PMasa \*ziy “house”) [Ajello et al. 2001: 11], Gizey/Wina ɓùr “flèche” [Ajello et al. 2001: 26].

**163.2.** A deverbal origin of the above term for “arrow” is possible, cf. WCh.: Hausa ɓíllà “to throw” [Stolbova 1996: 27] | Ron \*ɓol “schießen” [GT]: Fyer ɓol, Bokkos ɓol, Daffo-Butura ɓol (Ron: Jng. 1968: 12, #143; 1970: 392) || CCh.: Daba ɓàl “to throw (an arrow)” [Barreteau 1995: 225].

**163.3.** O. V. Stolbova (1996: 27) preferred equating this Chadic verbal root (presented right above sub #80.2.) with some reflexes of WCh. \*v<sup>m</sup>bl “to throw (a weapon like arrow)” [GT], cf. WCh.: Kulere ɓìl “werfen (Stock usw.), bewerfen” [Jng. 1970: 351] = “to throw” [Newman 1977: 186] | Bole ?umbul “wegschleudern” [Lukas 1971: 133] || CCh.: Zelgwa mbál “to throw an arrow” [Brt. 1995: 202]. V. Orel and O. Stolbova (1990: 80, #51) rightly compared Bole ?umbul with Ar. nabala “jeter, lancer des traits, des dards”, nabl-at- “une flèche” [BK II 1187-8].

**163.4.** Elsewhere, V. Orel & O. Stolbova (HSED #1768) combined Bole ?umbul less convincingly with Ar. mi<sup>v</sup>bal-at- and Eg. m<sup>v</sup>b3 (a well-known isogloss, see below)<sup>53</sup> < AA \*mi<sup>v</sup>Vbal- “arrow, spear”, which is untenable in this direct way, since Ch. \*mb- cannot be immediately equated with Eg.-Sem. \*v<sup>c</sup>b, cf. Eg. m<sup>v</sup>b3 “Art Speer” (PT, Wb II 47, 1-3, cf. RdE 15, 1963, 60, n. 1) = “harpoon” (FD 105) = “lance, spear, also harpoon” (Caminos 1972: 219, cf. WD I 85) = “Harpune, (Fisch)Speer” (GHWb 327; ÄWb I 516) || CSem.: Ar. mi<sup>v</sup>bal-at- “a broad and long arrow-head or an iron (iron-head) made broad, an arrow having a broad head” [Lane 1942] = “1. fer de flèche long et large, 2. flèche au fer long et large” [BK II 159] = mi<sup>v</sup>bal-at- “a kind of arrow” [Ember after Nöldeke 1910: 55] = mi<sup>v</sup>bal-at- “arrow with a thick head” [Albright 1919: 179, #11] = mi<sup>v</sup>bal-at- “large arrow point” vs. mi<sup>v</sup>bal- “cutting tool” [Fronzaroli 1977: 164] = mi<sup>v</sup>bal-at- “arrow” [Vycichl in DELC 108] = “arrowhead” [Leslau] || ES: Geez ma<sup>v</sup>bal “sharp instrument, arrow” [Ember] = mab<sup>v</sup>al ~ mā<sup>v</sup>bal “instrument, utensil, weapon” [Albright 1919: 179, #11] = ma<sup>v</sup>bal ~ mab<sup>v</sup>al “trait, javelot” [Cohen] = mā<sup>v</sup>bal “telum, jaculum” [Vycichl] = ma<sup>v</sup>bäl “arrow” [Fronzaroli 1977: 164] = mā<sup>v</sup>əbal ~ mā<sup>v</sup>əbalt “1. tool, instrument, fittings, 2. arrow, weapon, spear” [Leslau 1987: 54]. The Egypto-Semitic stem \*mV-<sup>v</sup>bVI- was apparently a *nomen instrumenti* formation (cf. Grapow 1914: 23), but the basic meaning of the underlying Eg.-Sem. \*v<sup>c</sup>bl is obscure in both

<sup>53</sup> Literature for this Eg.-Sem. match: Ember 1926: 5, #1; 1930 = ESS, §3.c.3, §5.a.19; Vycichl 1934: 55; 1958: 372; 1983 = DELC, 108; Calice 1936 = GÄSW, #623; Cohen 1947: #57; HSED #1768.

branches (no trace in Egyptian and highly disputed speculative hypotheses in Semitic),<sup>54</sup> or, at least, such an expectable verbal root does not appear in the logically expectable form, such as a nowhere attested NAA  $**\sqrt{^c}bl$  “to shoot” (or sim.) [GT], which is itself a revealing circumstance suggesting that pre-Eg.-Sem. \*mV- $\sqrt{^c}bVl$ - had already been in use as a ready-made (pre-Neolithic, early PAA?) technical term by the time of a secondary Egypto-Semitic cohabitation the Nile valley Neolithic period (5<sup>th</sup>-4<sup>th</sup> mill. BC) when the original verbal root in both branches was no longer in use or, at least, was not the most frequented synonymous variety in both branches. Highly suspicious in this context is the trace of a possible PAA  $*\sqrt{^c}bl$ , instead of NAA (where both Semitic and Egyptian belong) in SAA, namely CCh.: Munjuk-Puss bili (bəla) “1. percer, 2. enfonceur (une pointe)” [Tourneux 1991: 79].

**163.5.** Moreover, the weapon name can be pointed out, again from Chadic, in its simplest biradical root form (i.e., void of either C<sub>1</sub>- \* $\sqrt{^c}$ - or prenasalization) also, cf. Ch.  $*\sqrt{^c}bl$  “to throw a weapon” [GT]<sup>55</sup> Note that these Chadic cognates are to be distinguished from Ch. \*bal- “(to shoot an) arrow” [Stolbova] (discussed above), which Stolbova (CLD I 35) erroneously equated with Ar. nabala.

**164. Mubi bəldik** (m) “fouet” [Jng. 1990 MS: 6]: puzzling for the time being. At any rate, we may in principle safely reckon with a transposition of glottalization in this case also, i.e.,

<sup>54</sup> Most suggestive is Ar.  $\sqrt{^c}abala$  “to cut (off) to extirpate it” or  $\sqrt{^c}abula$  “to be(come) large, big, bulky, thick” [Lane 1941]. Already Th. Nöldeke (1910: 55) separated Geez mā $\sqrt{^c}bal$  “arrow” from Geez mab $\sqrt{^c}al$  “instrument”. Following him, A. Ember (1926: 5, #1) treated Ar. mi $\sqrt{^c}bal$ -at- “a kind of arrow” as a borrowing from Geez mā $\sqrt{^c}bal$  “arrow”. W. F. Albright (1919: 179, #11), followed later by W. Leslau (1987: 84), combined the Geez and Ar. noun with Akk. (nA, jB) bēlu “etwa: Waffe” [AHW 120], which is uncertain. Following Dillmann, Albright derived Ar. mi $\sqrt{^c}bal$ -at- “arrow with a thick head” from  $\sqrt{^c}abila$  “to be thick”. P. Fronzaroli (1977: 160-4), in turn, saw the source of Geez ma $\sqrt{^c}bal$  “arrow” and Ar. mi $\sqrt{^c}bal$ - “cutting tool”, mi $\sqrt{^c}bal$ -at- “large arrow point” in Sem.  $*\sqrt{^c}bl$  > Ar.  $\sqrt{^c}abala$  “to cut”,  $\sqrt{^c}ablā$ - “white rock, narrow strip in the blackness of the earth, the stones of which are white”,  $\sqrt{^c}abāl$ - “white stone or mountain of which the stones are white” [Fronzaroli], Dathina  $\sqrt{^c}ibāl$  (pl.) “heaps of corn” [Fronzaroli] || MSA: Soqotri pl.  $\sqrt{^c}ébhaléten$  “sharp stones”, cf. mā $\sqrt{^c}bher$  “rock” [Leslau 1938: 293, 296], Mehri  $\sqrt{^c}aybēl$  [Fronzaroli] =  $\sqrt{^c}aybēl$  “flint(stone)” [Johnstone 1987: 10] | Geez  $\sqrt{^c}ubāl$  “hill” [Leslau 1987: 54]. Fronzaroli set up two PSemetic etymons, namely  $*\sqrt{^c}abl$ -at- “a white stone” vs.  $*\sqrt{^c}ibal$ - “white stones” (supposed source of the name of Ebla), both carrying the basic meaning “a rock of clear, shining appearance similar to flint but coarse-grained, prob. a variety of granite”. In Fronzaroli’s view, the occasional use of this rock as flintstone explains the Mehri and Soqotri data, while the Ar. reflexes suggest the stone  $*\sqrt{^c}abl$ - was used for making baldes and points. Ar.  $\sqrt{^c}abala$  I “10. garnir une flèche d’un fer long et large” [BK II 158]. The authors of SISAJA I #96, the Diakonoff team (1981) considered Geez ma $\sqrt{^c}bal$  to be the metathesis of Geez mab $\sqrt{^c}al$  (lit. “working tool”) explained from Sem.  $*\sqrt{^c}p̄l$  ~  $*\sqrt{^c}b̄l$  “make, do”. W. Leslau (1987: 54, 84) assumed in Geez the following scenarios: (1) Geez mā $\sqrt{^c}bal$ (t) derives directly from Geez  $\sqrt{^c}bl$  II  $\sqrt{^c}abbala$  “to make, do” (which Leslau linked to Sem.  $*\sqrt{^c}ml$  “to work”). (2) Geez mā $\sqrt{^c}bal$ (t) is met. of Geez mab $\sqrt{^c}al$  ~ mab $\sqrt{^c}al$  “iron tool, axe”, cognate with Ug.  $\sqrt{^c}b̄l$  “to make, manufacture, work” [DUL 203] || E/OSA  $\sqrt{^c}b̄l$  “to work, excavate bedrock (travailler, creuser le soubassement rocheux)” [SD 26].

<sup>55</sup> The underlying verbal root has become known from Chadic, cf. WCh.: Kupto bùuléy “werfen, schleudern” [Leger 1992: 18], Geruma bēel-áálà “to throw” [Schuh 1978: 118] || CCh.: Glavda bal “to throw, cast” [Rapp & Benzing 1968: 13] | Mada bál “to shoot” [Rossing 1978: 324, #635] | Puss bili “lancer, jeter (une seule chose)” [Tourneux 1991: 79], perhaps Mbara vlà [vl- < \*bl-?] “jeter”, vùl “lancer, jeter” [TSL 1986: 280]. Accordingly, with no surprise, the nominal derivative is equally only attested in WCh.: Tangale bal “spear with a long blade” [Jng. 1991: 70] || CCh.: Masa \*bir </-> \*bil “couteau de jet” [GT]; Masa bíl “couteau de jet” [Caïtucoli 1983: 38] Masa bíl [billâ] “1. le couteau de jet, 2. le courant du fleuve (métaph.)” [Caïtucoli 1983: 50], Masa-Bongor bíl-lâ “couteau de jet” [Jng. 1971/2 MS: 81], Lame bérà “couteau de jet” [Sachmine 1982: 283], Zime-Dari pérà “couteau de jet” [Cooper 1984: 21].

þèldík < Ch./AA \*bVlt/č/čVK. If it was a compound, as it looks like to be, for the first component cf. WCh.: Hausa búúláálà “hippo-hide whip” [Abraham 1962: 117] || ECh.: (???) Nancere buul “Besen” [Lukas 1937: 89]? But as for the second one, hard to make even guesses.

**165. Jegoid \*þElkU “crocodile” [GT]:** Jegu þílkò, pl. þílk “Krokodil”, þílké “weibl. Krokodil” [Jng. 1961: 111] = þílkó [Jng. apud JI 1994 II 95: isolated in Ch.], Kofa þélkó (m), pl. þélkán “crocodile” [Jng. 1977 MS: 12, #295] || WCh.: Kofyar þálák [reg. < \*balak] “hunger” [Netting 1967: 2; Takács 2004: 26: isolated in AS] || Sem. \*√þlk “1. to be eager (?), 2. greedily devour (?)” [GT]: perhaps attested from the cognacy of Hbr. √þlk qal “verwüsten” [GB 102] = “dévaster, ravager” [DRS 69, BLQ1] = “to lay waste (the land)” [KB 135]<sup>56</sup> | Syrian b̄laq “désirer” [DRS 69, BLQ4] and Mandaic baliqa “greedy” < √þlk “1. to swallow up, devour, 2. be greedy” [Drower-Macuch 1963: 48, 66] = baliqa “glouton, cupide” [DRS 69, BLQ2: isolated]<sup>57</sup> | Ar. balaqa I “1. emporter, enlever (les pierres, se dit d'un torrent)” [BK I 163]<sup>58</sup> (Sem.: DRS) < PAA \*√þlk “1. to be greedy, 2. devour, spoil” [GT].<sup>59</sup> The semantic connection of “greedy” and “crocodile” is attested in Ancient Egyptian.<sup>60</sup>

<sup>56</sup> Usually kept in Semitic lexicography (GB, DRS, KB) apart from the Mandaic root and better affiliated with the diverse homophonous Arabian roots whose sense are ranging as far as “to open” and “close (doors)”, which is semantically difficult to follow.

<sup>57</sup> Treated in DM l.c. or DRS l.c. as a modified form of Sem. \*√þl<sup>c</sup> > Mandaic √þla “to swallow up, devour”, although the latter root did not result in the sense “greedy”, cf. only Mandaic bla(ia)jia “swallowers, consumers” [Drower-Macuch], but also NSyriac \*(m)banqil “avaler, s' envirer” [DRS 72]. One wonders if the Mandaic-Kofyar parallel with a C<sub>3</sub> = AA \*-k is due to pure chance or inheritance.

<sup>58</sup> It would be perhaps thinkable to affiliate here Ar. balaqa I “5. violer, forcer une fille” [BK I 163] = baliqa and baluqa “2. he devirginated or defloured a girl” [Lane col. 253a] = balaqa I “violier (une fille)” [DRS 69, BLQ1] also to be explained from \*“to greedily devour”, but in Arabic lexicography, it has traditionally been rendered from the primary sense of stem I and IV “3. ouvrir brusquement la porte ou l'ouvrir tout entier” [BK I 163] = I “1. he opened a door wholly or vehemently” [Lane col. 253a] = IV “ouvrir/fermer (brusquement une porte)” [DRS 69, BLQ1].

<sup>59</sup> The third radical of PAA \*√þlk must have been an ancient (PAA) root extension, cf. SAA \*√þl “2. greed, avarice” [GT]: LECu.: Somali béllo “Habgier, Egoismus” [Reinisch 1902: 83] || CCh.: Hitkala(nchi) (Hide) mbuli “avare” [Eguchi 1971: 219]. The same root may have been extended by a C<sub>3</sub> \*-m in PAA (???) \*√þlm “1. to feel lust, 2. be greedy” (?) [GT] > Sem.: Ar. balama “être en chaleur (se dit d'une chamelle)”, balam- “penchant sexuel violent chez une chamelle, et enflement des parties sexuelles” [BK I 164] = balama “être en rut (chamelle) / to be in heat (she-camel)”, balam-(at-) “tumescence vulvaire (de la chamelle, lors du rut)”, mu-blím- “(chamelle) en rut, non encore saillie / (she-camel) in heat, not yet covered” [DAFA 831] || presumably Eg. bnw.t “von geilten Tieren, die sich vor dem Coitus beriechen” (OK, Wb I 459, 2) = bnw.tj “lubrique” (AL 78.1324) = bnw.t “\*Brunt” (GHWb 253), whose root may be conceived as a result of a dissimilation of two incompatible labials (i.e., \*√þlm > \*√þlw???) || CCh.: (???) Musgu búlemi (Rohlf), búlimi (f), pl. búlamai (Krause) “unverheiratet” [Lukas 1941: 48] || ECh.: Mokliko búlmè “le fait d'être insatiable, avidité” [Jng. 1990: 69]. Note that in DRS 68, BLM1, Ar. ?ablamu “qui a les lèvres enflées”, balam-at- “tumescence vulvaire (de la chamelle en rut)”, whence Ar. balama “être en rut” was apparently treated just as a secondary denominative derivation, was affiliated with unrelated roots stemming from the basic sense “lier”. Ultimately akin to LECu.: Oromo bel-a “1. fame, 2. miseria, scarsità, carestia”, belaū “1. aver fame, appetito, essere affamato, 2. essere ridotto nella miseria” [da Thiene 1939: 38] = bēl-a “hunger, famine”, bēla<sup>w</sup>a “to be/go hungry” [Gragg 1982: 44]: < AA \*√þl “3. hunger” [GT] vs. AA \*√þl “1. desire, lust” (above)? Does this bunch of roots ultimately derive from N/P??AA \*√þl “1. desire, lust” [GT] forming a widespread AA family? Cf. EAAN I 65-66, #276, #277, #278.

<sup>60</sup> Cf. LEg. <sup>c</sup>f ~ <sup>c</sup>f<sup>c</sup>f “Bez. des Krokodils” (GR, Wb I 182, 13) = <sup>c</sup>f<sup>c</sup> “crocodile (the “greedy one”), perhaps because of its appetite in catching fish or carrion meat” (PL 152) vs. <sup>c</sup>fj “gierig (?”, vgl. das ältere 3f<sup>c</sup> (NE, Wb

**165.1.** Moreover, the pass. sense \*“to be spoilt” of the same (?) root may have resulted in PAA \**blk* “3. wrong, 4. worn-out, 5. devastated” [GT],<sup>61</sup> which may have once, clearly in PAA, been eventually developed from the preceding root by an extension of the semantical spectrum.

**166. Kujarke \***wā “dog” [Doornbos & Bender 1983: 76, #19] ||| NOm. \**bw* “wild feline (?)” [GT]: NWOMETO \**baw-* “cat” [Bender 2003: 76, #12]: i.a. Basketo *bawa* “wild cat” [Fleming/Cerulli in Bender 2003: 325, #12], Malé *ba'wo* “cat” [Siebert in Bender 2003: 325, #12] | Janjero (Yemsa) *biw-à* “Schakal” [Lamberti 1993b: 334] | Sheko *boā* “hyena” [Fleming] (isolated in Dizoid: Bender 2003: 349, #48) ||| SOM.: Ari (Galila of Fleming) *bawa* “cat” [Bender & Tully apud Bender 2003: 347, #12: isolated in Aroid] ||| SCU. \**bwah-* “hyena or jackal” [GT]: WRift \**bah-ā*, pl. \**bah-u* “hyena” [KM]:<sup>62</sup> Iraqw *baha*, pl. *bahu*, Alagwa *baha*, pl. *bahu*, Burunge *baymo* [< \**bah-im-o*], pl. *bawu* [< \**bahu*] (WRift: KM 2004: 68) | Asa *bō-k* (masc. n. suffix -k) “hyena” [Ehret] | Dahalo *bwéha* [*b-* < SCU. \**b-*] “jackal” [Maddieson quoted by Blažek]<sup>63</sup> (SCU.: Ehret 1980a: 136, §I.A.24) ||| CCh.: Chibak *bou'a* ~ *buhá* “Schakal” [Hoffmann 1955: 123] < SAA \**bwih* (stem pattern \**bawh-?*) “wild feline (jackal?) sp.” [GT].

**166.1.** Hard to decide<sup>64</sup> whether this root is ultimately connected to an apparently different, though almost homophonous and synonymous one, present in Ethio-Semitic (borrowed from

I 182, 12) = *f* “greedy” (NK, PL 152) < *3f* “gierig, gefrässig” (Lit. MK, NE, Wb I 9, 17) = “glutton(y)” (Lit. MK, FD 3) vs. *f3* “to devour (?)” (CT I 30, FD 42).

<sup>61</sup> Cf. Sem.: Ar. *ba/ulūq-at-* and *ballūq-* “1. désert, plaine vaste et stérile” [BK I 163], cf. also Ar. *balqa*<sup>a</sup> Q.I “it (a country or region) was or became vacant, void, destitute of herbage or pasturage and of human beings”, Q.III *?iblanqa*<sup>a</sup> “it (sorrow, grief or anxiety) became removed or cleared away”, *balqa*<sup>e</sup>- “1. a land that is vacant or void, destitute of herbage or pasturage and of human beings in which is nothing, vacant or void place (of alighting or abiding), 2. a woman devoid of every good quality” [Lane col. 253b-c] = *balqa*<sup>a</sup> I “être inculte et inhabité (se dit d'un pays)”, *balqa*<sup>e</sup>- and *balqa*<sup>a</sup>-at- “1. pays inculte, inhabité, 2. femme mauvaise, sans aucune qualité ni vertu” [BK I 163-164] = *balqa*<sup>e</sup>- “1. pays aride, désertique, désert vide, 2. (métion.) (femme) dénuée de qualités, (woman) bereft of all good qualities, 3. (adj.) désertique”, *balqa*<sup>a</sup> “être balanqa<sup>e</sup>- “totalement désert (lieu, piste), utterly deserted (place, track)” [DAFA 822b-823a] ||| NBrb.: perhaps Qabyle *a-ballay* “1. méchant, 2. tête”, *ta-ballay-t* “mauvaise affaire, difficulté” [Dallet 1982: 25; DRB 65, bly/q9-10: isolated in Brb.] ||| CCh.: Munjuruk-Puss *bilki* (*ḥelka*) “abîmer” [Tourneux 1991: 79] | PMasa *\*ḥalak* “to become worn-out” [GT]: Masa *ḥulak* “(tr. ou intr.) 1. user ou 2. s'user”, [*ḥulākṣa*] (composé?) “le fait d'user ou de s'user” [Caütucoli 1983: 54], Gizey/Wina, Ham, Musey *bálák*, Masa *búlák*, Marba *blák* “abîmer” [Ajello et al. 2001: 1], Gizey/Wina *bálák*, Masa *búlák*, Ham *bálák*, Musey *bálák*, Lew *blák*, Marba *blák* “détérriorer” [Ajello et al. 2001: 20].

<sup>62</sup> Affiliated by R. Kießling and M. Mous (l.c.) with ECU. \**bahal-* “wild animal” [Sasse] and Tanzanian Bantu of zone G \**bau* ~ \**bagu* “hyena” [Bastin] remarking that “the presence of a velar plosive in abovious cognates of other zones, e.g. *mbagu* ‘big hyena’ in Nyamwezi, seem to run counter againsts Ehret's 1974 hypothesis of a straightforward transfer from a Southern Cushitic source into Bantu.”

<sup>63</sup> This Dahalo reflexes was ignored by Ch. Ehret (1980: 136, §I.A.24) and R. Kießling and M. Mous (l.c.). The equation with Dahalo *báhōma* “female hippopotamus” derived by Ehret from an alleged SCU. \**bah-* “large wild animal” in this entry is certainly out of the question, since this word belongs to an entirely different etymon, cf. Sem.: Hbr. *báhēmā* “Vieh” and Ar. *báhīm-at-* “Kleinvieh” [GB 86 with a Semitological *Volksetymologie*].

<sup>64</sup> Some authors combined some of the reflexes of both AA roots, distinguished in this paper, under one common supposed etymon (Bed.-SCU.: Fleming 1969: 28; Bed.-Dasanech-Dahalo-SCU.: Blažek 2003: 241-242). Even today, V. Blažek (p.c., July 2022) views that some of the Chadic *comparanda*, listed in this paper also,

a Cushitic substrate?): Tigre báyhot, pl. báyhi “a species of jackal” [LH 1956: 294] ||| Bed. báyho “Schakal, Fuchs, *Canis vulpes Nilotica*” [Reinisch 1895: 54] ||| LECu.: Dasenech bày-c (m), pl. báy-à “jackal” [Tosco 2001: 486] ||| Eg.: uncertain reflex<sup>65</sup> ||| WCh.: Goemay mbai` [mbai] “domestic cat” [Sirlinger 1937: 136; Takács 2004: 12: isolated in AS] | Tangale þai\_ “dog” [Kidda 1985: 201, #32] < SAA \*þbyh (stem \*bayh-?) “wild feline (jackal?) sp.” [GT].

**167. MT \*baw-** “to go” [GT]: Mubi þau “gehen, laufen” [Lukas 1937: 180] = þow (þâ, nþâà) “partir, aller, se promener” [Jng. 1990 MS: 7], cf. also Mubi þa “gehen” [Lukas 1937: 180], Masmaje þo “aller” [Alio 2004: 280, #34] | WDangla þâàwè “aller (jamais dans le sens de venir /ásè/)" [Fédry 1971: 104], Mawa (close to Dangla) þen (þê, þa) “gehen (aller), weggehen (partir)” [Jng. 1978 MS: 2; 1980 MS: 28] | Sokoro þey “to go” [Saxon in JI 1994 II 163] ||| CCh.: Tera þá “to come” [Newman 1964: 47] < PCh. \*þV “идти, уходить” [Dlg.] = \*þ- “to go” [NM] = \*þ2- “to come, go (out)” [JI 1994 I: 78] ||| Om. \*þV “gehen” [Sasse] > COmeto \*b- and EOmeto \*ba(y) “to go” [Fleming] extended Wolayta cluster \*b- (mono-consonantal) “to go, walk” [Bender 2003: 17, #59] | SEOmeto \*ba [Bender 2003: 117, #59] > Kachama bâ “to go, walk” [CR in Bender 2003: 87, #59] ||| ECu. \*þah- “to go out” [Sasse] > LECu. \*þah- [Black 1974: 174, 202] (ECu.: Sasse 1982: 30-31; Dlg. 1973: 318) ||| SCU.: Ma'a bûhë “gehen” [Meinhof 1906: 308] = bu? ~ buh “to go” [Fleming] = -buhe ~ -bu “to go” [Ehret 1980: 139, #50]. The Mubi root was equated with the Ometo reflex already by M.L. Bender (1975: 165) who was pondering a cognacy with ECu. \*þah- “to go out” and/or Sem. \*þw? “1. to enter, 2. return” [GT] too. See also Greenberg 1955: 56; Fleming 1969: 25; 1974: 89; Dlg 1973: 318; Sasse 1981: 152, #4; SISAJa I #129; JI 1994 I 38; HSED #157; HCVA II #143; Voigt 1998: 609-610; Bender 2003: 117, #59.

**167.1. Is P<sup>2</sup>AA \*þbw<sub>h</sub> “to appear” [GT] identical with the preceding root?** Cf. Sem.: Ar. þbw<sub>h</sub> I: bâha “1. paraître, apparaître, être mis au grand jour, 2. être en public, 3. communiquer un secret, déclarer qqch. à qqn.” [BK I 176] = “to be revealed, become public” [Leslau] ||| ES: Geez þbw<sub>h</sub>: boha “to be seen, revealed, clear” [Leslau] (Sem.: Leslau 1987: 115) ||| (?) LEg. bh [unless \*b3h and if -h < \*-h] “1. aufgehen (von der Sonne), 2. hell glänzen (von der Milch)” (LP, GR, Wb I 423, 1-2) ||| CCh.: Logone bo “hervorschießen, aufwachsen” [Nct. in Lukas 1936: 87]. Cf. EDE II 291; EAAN I 71, #315.

\*

can also belong to this unified ‘jackal’ etymon (irrespective of the medial \*-w- vs. \*-y- in their roots and the apparently different C<sub>3</sub> laryngeal/pharyngeal, resp.) and not to the NOm. word stem for ‘cat’.

<sup>65</sup> As suggested in EDE II 147 (among some other alternatives), Eg. bjhs “ein Raubtier (nur als PN)” (NE, GHWb 248, not in Wb I 444 and PN I 93b), whose determinative appears to depict a smaller animal with four feet, longer tail resembling a fox (or sim.), may perhaps be akin to the Bedawye and Tangale terms.

## Special symbols

P: any labial stop (f, p, b, ḡ), T: unspecified dental stop (t, d, ḍ), S: any voiceless sibilant and/or affricate (s, š, ḥ, c, č, ḡ), Z: unspecified voiced sibilant and/or affricate (z, ʒ, ḡ), K: any velar stop (k, g, ḁ), Q: unspecified uvular or postvelar etc. (q, g, ḫ, ḡ), H: any of the pharyngeals or laryngeals etc. (ḥ, γ, h, h, ?). The vertical strokes signify the degree of closeness of the language groups (e.g. Kotoko | Masa), subbranches (e.g. North Berber || East Berber), and branches (Semitic ||| Egyptian), from which the individual lexical data are quoted.

## Abbreviations of languages and other terms

(A): Ahmimic, (A<sub>2</sub>) = (L): sub-Ahmimic = Lycopolitan dialect, aA: Old Assyrian (altassy-risch), aAk: Old Akkadian (altakkadisch), AA: Afro-Asiatic (Afrasian, Semito-Hamitic), Akk.: Akkadian, Amh.: Amharic, Ar.: Arabic, Aram.: Aramaic, AS: Angas-Sura, Ass.: Assyrian, (B) Bohairic, b/Bab.: Babylonian, BAram.: Biblical Aramaic, Bed.: Bed'awye (Beja), Brb.: Berber (Libyo-Guanche), BT: Bole-Tangale, C: Central, CAA: Common Afro-Asiatic, Ch.: Chadic, Cpt.: Coptic, CT: Coffin Texts, Cu.: Cushitic, Dem.: Demotic, DM: Dangla-Migama, E: East, Eg.: Egyptian, ES: Ethio-Semitic, Eth.: Ethiopian, Eth.-Sem.: Ethio-Semitic, (F): Fayyumic, GR: Ptolemaic and Roman period, H: Highland (in Cushitic), Hbr.: Hebrew, jB: younger Babylonian (jungbabylonisch), L: Late, L: Low(land), (L) = (A<sub>2</sub>): Lycopolitan dialect = sub-Ahmimic, lit.: literature, LP: Late Period, M: Middle, Mag.: magical texts, Med.: medical texts, MK: Middle Kingdom, MSA: Modern South Arabian, MT: Mubi-Toram, N: New, N: North, nA: Neo-Assyrian, NE (or NEg.): New Egyptian, NK: New Kingdom, nslm.: Taneslemt, O: Old, OK: Old Kingdom, Om.: Omotic, OSA: Old South Arabian, OT: Old Testament, P: Proto-, PB: Post-Biblical, PT: Pyramid Texts, reg.: regular, S: South, (S): Sahidic, Sem.: Semitic, Syr.: Syriac, Ug.: Ugaritic, W: West, Wlmd.: Tawllemmet.

## Abbreviations of author names

Abr.: Abraham, AJ: Alio & Jungraithmayr, Alm.: Alemayehu, Apl.: Appleyard, BK: Bieberstein & Kazimirski, Brt.: Barreteau, CR: Conti Rossini, Dbr.: Djibrine, Dkl.: Diyakal, Dlg.: Dolgopolsky, DM: Djibrine & Montgolfier, Frj.: Frajzyngier, Ftp.: Fitzpatrick, GB: Gesenius & Buhl, GT: Takács, IL: Institute of Linguistics, IS: Illič-Svitýč, JA: Jungraithmayr & Adams, JI: Jungraithmayr & Ibriszimow, Jng.: Jungraithmayr, JS: Jungraithmayr & Shimizu, KM: Kießling & Mous, LS: Lamberti & Sottile, LVC: Leus, Van de Loo, Cotter, Mkr.: Mukarovský, MM: Majzel and Militarev, Mnt.: Montgolfier, Net.: Nachtigal apud Lukas, NM: Newman & Ma, OS: Orel and Stolbova, PAM: Prasse, Alojaly, Mohamed, PG: Pillinger & Galboran, PH: Parker & Hayward, Prh.: Porhomovskij, RB: Rapp and Benzing, Rn.: Reinisch, Srl.: Sirlinger, TC: Taïne-Cheikh, TG: Tourneux, Seignobos, Lafarge.

## References

- Abraham, R.C. 1962. *Dictionary of the Hausa language*.<sup>2</sup> London: University of London Press.  
 Abraham, R.C. 1964. *Somali-English dictionary*.<sup>2</sup> London: University of London Press Ltd.  
 AHW = Soden, W. von. 1965-1981. *Akkadisches Handwörterbuch*. Bde. I-III. Wiesbaden: Otto Harrassowitz.  
 Ajello, R. & Karyo, M. & Melis, A. & Dobio, Ou. 2001. *Lexique comparatif de six langues tchadiques centrales (Gizey, Ham, Lew, Marba, Masa, Musey)*. Pisa: Edizioni Plus, Università di Pisa.  
 AL I = Meeks, D. 1977. *Année lexicographique: Égypte ancienne*. Tome 1. 2<sup>ème</sup> édition, 1998. Paris: Cybèle.  
 AL II = Meeks, D. 1978. *Année lexicographique: Égypte ancienne*. Tome 2. 2<sup>ème</sup> édition, 1998. Paris: Cybèle.  
 AL III = Meeks, D. 1979. *Année lexicographique: Égypte ancienne*. Tome 3. 2<sup>ème</sup> édition, 1998. Paris: Cybèle.

- Albright, W.F. 1919. Notes on Assyrian lexicography and etymology. *Revue d'Assyriologie* 16(4). 173-194.
- Alio, Kh. (in collaboration with Jungraithmayr, H.). 1988. *Allgemeine Kulturwortliste vom Toram*. MS. Frankfurt a/M, 28 August. 32 p.
- Alio, Kh. 2004. Préliminaires à une étude de la langue kajakse d'Am-Dam, de Toram du Salamaat, d'ubi du Guéra et de masmaje du Batha-est. In Takács, G. (ed.), *Egyptian and Semito-Hamitic (Afro-Asiatic) studies in memoriam Werner Vycichl*, 229-285. Leiden: E.J. Brill.
- Alio, Kh. & Jungraithmayr, H. 1989. *Lexique bidiya*. Frankfurt am Main: Vittorio Klostermann.
- Amborn, H. & Minker, G. & Sasse, H.-J. 1980. *Das Dullay: Materialen zu einer ostkuschitischen Sprachgruppe*. Berlin: Reimer Verlag.
- Appleyard, D. 1977. A comparative approach to the Amharic lexicon. *Afroasiatic Linguistics*.
- ÄWb I = Hannig, R. 2003. *Ägyptisches Wörterbuch I. Altes Reich und Erste Zwischenzeit* (Hannig-Lexica 4). Mainz am Rhein: Verlag Philipp von Zabern.
- Bargery, G.P. 1934. *A Hausa-English dictionary and English-Hausa vocabulary compiled for the Government of Nigeria*. London: Oxford University Press, Humphrey Milford.
- Barreteau, D. 1978. La transcription d'un texte mofu-gudur: Problèmes linguistiques. In Jungraithmayr, H. & Caprile, J.-P. (eds.), *Cinq textes tchadiques (Cameroun et Tchad): Présentation linguistique*, 7-54. Berlin: Dietrich Reimer.
- Barreteau, D. 1988. *Description du mofu-gudur: Langue de la famille tchadique parlée au Cameroun*. Livre II. Lexique. Paris: Éditions de l'ORSTOM.
- Barreteau, D. 1995. Vowel and tonal variations within the consonantal framework of the verbal system in Central Chadic languages. In Ibriszimow, D. & Leger, R. (eds.), *Studia Chadica et Hamito-Semitica*, 197-228. Köln: Rüdiger Köppe Verlag.
- Barreteau, D. & Brunet, A. 2000. *Dictionnaire mada*. Berlin: Dietrich Reimer Verlag.
- Belova, A.G. 1993. K voprosu o rekonstrukcii semitskogo kornevogo vokalizma. *Voprosy Jazykoznanija* 6. 28-56.
- Bender, M.L. 1975. *Omotic: A new Afroasiatic language family*. Carbondale, Illinois: Southern Illinois University.
- Bender, M.L. 1987. First steps toward Proto-Omotic. In Odden, D. (ed.), *Proceedings of the 16th Annual Conference on African Linguistics*, 21-35. Providence, Rhode Island: Foris.
- Bender, M.L. 1988. Proto-Omotic phonology and lexicon. In Bechhaus-Gerst, M. & Serzisko, F. (eds.), *Cushitic-Omotic. Papers from the First International Symposium on Cushitic and Omotic Languages, Cologne, January 6-9, 1986*, 121-159. Hamburg: Helmut Buske Verlag.
- Bender, M.L. 1994a. Aroid (South Omotic) lexicon. *Afrikanistische Arbeitspapiere* 38. 133-162.
- Bender, M.L. 1994b. The mystery languages of Ethiopia. In Marcus, H. (ed.), *New trends in Ethiopian Studies*, vol. 1, 1153-1174. Lawrenceville: Red Sea Press.
- Bender, M.L. 2003. *Omotic lexicon and phonology*. Carbondale: SIU Printing / Duplicating, Southern Illinois University.
- Biberstein Kazimirski, A. de. 1860. *Dictionnaire arabe-français*. Tomes I-II. Paris: Maisonneuve et Cie.
- Bitima, T. 2000. *A dictionary of Oromo technical terms: Oromo-English*. Köln: Rüdiger Köppe Verlag.
- BK = Biberstein Kazimirski, A. de. 1860. *Dictionnaire arabe-français*. Tomes I-II. Paris: Maisonneuve et Cie.
- Black, P.D. 1974. *Lowland East Cushitic: Subgrouping and reconstruction*. (Doctoral dissertation, Yale University.)
- Blažek, V. 1984. Gr. píthēkos. *Linguistica* 24. 443-447.
- Blažek, V. 2003. Fauna in Beja lexicon: A fragment of a comparative-etymological dictionary of Beja. In Kogan, L. (ed.), *Orientalia: Papers of the Oriental Institute*. Issue III, 230-294 (Studia Semitica). Moscow: Russian State University of Humanities.
- Blažek, V. 2010. Glottochronological classification of Oromo dialects. *Lingua Posnaniensis* 52(2). 27-42.
- CAD = *The Assyrian dictionary of the Oriental Institute of the University of Chicago*. Since 1956.
- Caïtucoli, C. 1983. *Lexique masa*. Paris: Agence de Coopération Culturelle et Technique.
- Calice, F. 1936. *Grundlagen der ägyptisch-semitischen Wortvergleichung*. Wien: Selbstverlag des Orientalischen Institutes der Universität Wien.
- Caminos, R. 1972. Another hieratic manuscript from the Library of Pwerem Son of Ḫikī (Pap. B.M. 10288). *JEA* 58. 205-224.
- Caprile, J.-P. 1975. *Lexique tumak-français (Tchad)*. Berlin: Verlag von Dietrich Reimer.
- Carnochan, J. 1975. Bachama and Chadic. In Bynon, J. & Bynon, Th. (eds.), *Hamito-Semitic*, 459-468. The Hague: Mouton.

- CLD I = Stolbova, O.V. 2005. *Chadic lexical database*. Issue I. L, N, NY, R. Kaluga: Poligrafiya.
- CLD VI = Stolbova, O.V. 2020. *Leksičeskaja baza dannyh po čadskim jazykam*. Vypusk VI. *Gubnyje b, f, p. / Chadic lexical database*. Issue VI. Labials b, f, p. Moskva: IV RAN, Rossijskaja Akademija Nauk, Institut Vostokovedenija / Moscow: IV PAN (sic), Institute of Oriental Studies, Russian Academy of Sciences.
- Cohen, M. 1947. *Essai comparatif sur le vocabulaire et la phonétique du chamito-sémitique*. Paris: Librairie Ancienne Honore Champion.
- Colizza, G. 1887. *Linga 'Afar nel nord-est dell'Africa*. Wien: Alfred Hölder.
- Conti Rossini, C. 1912. *La langue des Kemant en Abyssinie*. Wien: Alfred Hölder.
- Conti Rossini, C. 1937. Contributi per la conoscenza della lingua Haruro (Isole del Lago Margherita). *Rendiconti della Reale Accademia Nazionale dei Lincei, Classe di Scienze morali, storiche e filologiche*, ser. VI, vol. XII, fasc. 7-10. 621-679.
- Cooper, K.N. 1984. *Lexique zime-français. Vūn tārī*. Sarh (Tchad): Centre d'Études Linguistiques.
- DAFA = Blachère, R. & Chouémi, M. & Denizeau, C. & Pellat, Ch. 1967-1976. *Dictionnaire arabe-français -anglais (Langue classique et moderne)*. Tomes I-III. Paris: Maisonneuve et Larose.
- Dallet, J.-M. 1982. *Dictionnaire qabyle-français: Parler des At Mangellat (Algérie)*. Paris: SELAF (Société d'études linguistiques et anthropologiques de France).
- DELC = Vycichl, W. 1983. *Dictionnaire étymologique de la langue copte*. Leuven: Peeters.
- Delheure, J. 1984. *Dictionnaire mozabite-français*. Paris: Société d'Études Linguistiques et Anthropologique de France (SELAF).
- Delheure, J. 1987. *Dictionnaire ouargli-français*. Paris: Société d'Études Linguistiques et Anthropologique de France (SELAF).
- DG = Erichsen, W. 1954. *Demotisches Glossar*. Koppenhagen: Ejnar Munksgaard.
- Djibrine, B.A.Z. & Montgolfier, P. de (etc.). 1973. *Vocabulaire dangaléat: Kowo dayla*. (Place & publisher not indicated).
- DLE = Lesko, L.H. 1982, 1984, 1987, 1989. *A dictionary of Late Egyptian*. Vols. I-IV. Berkeley: B.C. Scribe Publications.
- Dolgopol'skij, A.B. 1966. Materialy po sravnitel'no-istoričeskoj fonetike kušitskih jazykov: Gubnye i dental'nye smyčnye v načal'nom položenii. In Uspenskij, B.A. (ed.), *Jazyki Afriki. Voprosy struktury, istorii i tipologii*, 35-88. Moskva: Nauka.
- Dolgopolski, A.B. 1967. La permutation des \*m et \*b initiaux dans les racines couchitiques. In *Il Congrès International des Africaniestes: Communications de la délégation de l'URSS*, 3-17. Moscou: Nauka.
- Dolgopol'skij, A.B. 1973. *Sravnitel'no-istoričeskaja fonetika kušitskih jazykov*. Moskva: Nauka.
- Dolgopolsky, A.B. 1992. *From Proto-Semitic to Hebrew: Phonology. Etymological approach in a Hamito-Semitic perspective*. MS. Haifa, 298 p.
- Doornbos, P. & Bender, M.L. 1983. Languages of Wadai-Darfur. In Bender, M.L. (ed.), *Nilo-Saharan language studies*, 43-79. East Lansing, Michigan: Michigan State University.
- Dozy, R. 1881. *Suppléments aux dictionnaires arabes*. Tomes I-II. Leiden – Paris: E. J. Brill – Maisonneuve.
- DRB = Nait-Zerrad, K. Since 1998. *Dictionnaire des racines berbères (formes attestées)*. Paris & Louvain: Peeters. [Continuous pagination in the subsequent fascicles.]
- Drower, E.S. & Macuch, R. 1963. *A Mandaeic dictionary*. Oxford: Clarendon Press.
- DRS = Cohen, D. *Dictionnaire des racines sémitiques ou attestées dans les langues sémitiques*. Fascicules 1-2 (1970-1976), Paris & La Haye: Mouton. Fascicule 3- (1993-): Leuven: Peeters. [With continuous pagination.]
- DUL = Olmo Lete, G. & Sanmartín, J. 2003. *A dictionary of the Ugaritic language in the alphabetic tradition*. Part One [?(a/i/u)-k]. Part Two [l-z]. Leiden: E.J. Brill.
- EAANI = Takács, G. 2016. *Etyma Afroasiatica nova: Roots with initial labials (\*b-, \*p-, \*f-, \*m-)*. Berlin: Dietrich Reimer Verlag.
- Ebert, K.H. 1976. *Sprache und Tradition der Kera (Tschad)*. Teil II. Berlin: Dietrich Reimer.
- Ebobisse, C. 1979. *Die Morphologie des Verbs im Ost-Dangaleat (Guera, Tschad)*. Berlin: Dietrich Reimer Verlag.
- Ebobisse, C. 1987. *Les verbaux du dangaléat de l'est (Guera, Tchad): Lexiques français-dangaléat et allemand-dangaléat*. Berlin: Dietrich Reimer Verlag.
- EDE I = Takács, G. 1999. *Etymological dictionary of Egyptian*. Volume One: *A phonological introduction*. Leiden: E.J. Brill.
- EDE II = Takács, G. 2001. *Etymological dictionary of Egyptian*. Volume Two: *b-, p-, f-*. Leiden: E.J. Brill.
- EDE III = Takács, G. 2008. *Etymological dictionary of Egyptian*. Volume Three: *m-*. Leiden: E.J. Brill.

- Eguchi, P.K. 1971. Matériaux pour servir à l'étude de la langue hidé: Vocabulaire. *Kyoto University African Studies* 6. 195-283.
- Ehret, Ch. 1980. *The historical reconstruction of Southern Cushitic phonology and vocabulary*. Berlin: Dietrich Reimer Verlag.
- Ehret, Ch. 1987. Proto-Cushitic reconstruction. *Sprache und Geschichte in Afrika* 8. 7-180.
- Ehret, Ch. 1995. *Reconstructing Proto-Afroasiatic (Proto-Afrasian): Vowels, tone, consonants, and vocabulary*. Berkeley – Los Angeles, California: University of California.
- Ehret, Ch. 1997. (Additions to the Afroasiatic reconstructions.) MS. Los Angeles, California. 522 p.
- Ehret, Ch. 2000. (Additions to the Afroasiatic reconstructions.) MS. Los Angeles, California.
- Ehret, Ch. & Ali, M.N. 1984. Soomaali classification. In Labahn, T. (ed.), *Proceedings of the Second International Congress of Somali Studies*, vol. 1, 201-269. Hamburg: Buske Verlag.
- Ember, A. 1926. Several Egypto-Semitic etymologies. *Oriens. The Oriental Review* 1. 5-8.
- Ember, A. 1930. *Egypto-Semitic studies*. Leipzig: The Alexander Cohut Memorial Foundation.
- ESS = Ember, A. 1930. *Egypto-Semitic studies*. Leipzig: The Alexander Cohut Memorial Foundation.
- FD = Faulkner, R.O. 1962. *A concise dictionary of Middle Egyptian*. Oxford: Clarendon Press.
- Fédry, J. (avec la collaboration de Khamis, J. & o/Nedjei, M.). 1971. *Dictionnaire dangaleat (Tchad)*. Thèse de 3<sup>e</sup> cycle, Institut National des Langues et Civilisations Orientales. Lyon: Afrique et Langage.
- Fitzpatrick, J.F.J. 1910-1911. Some notes on the Kwolla District and its tribes. *Journal of the Royal African Society* 10. 16-52, 213-22.
- Fleming, H.C. 1964. Baiso and Rendille: Somali outliers. *Rivista degli Studi Etiopici* 20. 35-96.
- Fleming, H.C. 1969. Asa and Aramanik: Cushitic hunters in Masai-Land. *Ethnology* 8(1). 1-36.
- Fleming, H.C. 1974. Omotic as an Afroasiatic family. *Studies in African Linguistics. Supplement* 5. 81-94.
- Foulkes, H.D. 1915. *Angass manual: Grammar, vocabulary*. London: Kegan Paul, Trench, Trübner and Co.
- Foucauld, Ch. de. 1951-2. *Dictionnaire touareg-français, dialecte de l'Ahaggar*. Vols. I-IV. Paris: Imprimerie Nationale de France.
- Frajzyngier, Z. 1985. *A Pero-English and English-Pero vocabulary*. Berlin: Dietrich Reimer Verlag.
- Freytag, G.W. 1833. *Lexicon arabico-latinum*. Vols. I-IV. Halle.
- Fronzaroli, P. 1977. West Semitic toponymy in Northern Syria in the third millennium B.C. *Journal of Semitic Studies* 22(2). 145-166.
- Gabelentz, G. von der. 1894. *Die Verwandtschaft des Baskischen mit den Berbersprachen Nord-Africas nachgewiesen von G.v.d. Gabelentz*. Herausgegeben nach dem hinterlassenen Manuskripte durch Dr. A.C. Graf von der Schulenburg. Braunschweig: Verlag von Richard Sattler.
- GÄSW = Calice, Graf F. von. 1936. *Grundlagen der ägyptisch-semitischen Wortvergleichung*. Wien: Selbstverlag des Orientalischen Institutes der Universität Wien.
- GB = Gesenius, W. (bearbeitet von Buhl, F.). 1962. *Hebräisches und aramäisches Handwörterbuch über das Alte Testement*. Unveränderter Neudruck der 1915 erschienenen 17. Auflage. Berlin – Göttingen – Heidelberg: Springer-Verlag.
- GHWb = Hannig, R. 1995. *Grosses Handwörterbuch Ägyptisch-Deutsch (2800-950 v. Chr.)*. Mainz: Verlag Philipp von Zabern.
- Gragg, G. 1982. *Oromo dictionary*. East Lansing, Michigan: Michigan State University.
- Grapow, H. 1914. Über die Wortbildungen mit einem Präfix m- im Ägyptischen. *Abhandlungen der Kgl. Preussischen Akademie der Wissenschaften*. 3-33.
- Grapow, H. 1954. *Anatomie und Physiologie* (Grundriß der Medizin der Alten Ägypter I.). Berlin: Akademie-Verlag.
- Greenberg, J.H. 1955. *Studies in African linguistic classification*. Branford, Connecticut: Compass Publishing Company.
- Guthrie, M. 1971. *Comparative Bantu: An introduction to the comparative linguistics and prehistory of the Bantu languages*. Part I. Vol. 2. *Bantu prehistory, inventory and indexes*. Westmead, Farnborough, Hants: Gregg International Publishers.
- Haller, B. & Lawarum, A. & Douatai, D. & Pourtshom, H. & Baitoua, J.-P. & Magdeme, G. & Amadou, J. 1986. *Zulgo lexicon*. Cameroun: SIL.
- Hayward, D. (= R. J.). 1984. *The Arbore language: A first investigation including a vocabulary*. Hamburg: Helmut Buske Verlag.

- HCVA I-V = Diakonoff, I.M. & Belova, A.G. & Militarev, A.Ju. & Porhomovskij, V. Ja. & Stolbova, O.V. 1993-1997. Historical comparative vocabulary of Afrasian. Parts 1-5. *St. Petersburg Journal of African Studies* 2-6.
- Heine, B. 1975. Notes on the Yaaku language (Kenya). *Afrika und Übersee* 58(2). 119-138.
- Heine, B. 1977. Bemerkungen zur Boni-Sprache (Kenia). *Afrika und Übersee* 60. 242-295.
- Hellwig, B. 2000. *Goemai – English – Hausa dictionary*. MS. Draft. Printed out on 20 August 2000. 42 p.
- Hintze, F. 1951. Zur hamitosemitischen Wortvergleichung. *Zeitschrift für Phonetik und Allgemeine Sprachwissenschaft* 5. 65-87.
- Hodge, C.T. 1968. Some Afroasiatic etymologies. *Anthropological Linguistics* 10(3). 19-29.
- Hodge, C.T. 1989. Touching the bases (Presidential address). In Brend, R.M. & Lockwood, D.G. (eds.), *The Fifteenth LACUS Forum 1988*, 5-21. Lake Bluff: LACUS.
- Hodge, C.T. 1990. The role of Egyptian within Afroasiatic. In Baldi, Ph. (ed.), *Linguistic change and reconstruction methodology*, 639-659. Berlin – New York: Mouton de Gruyter.
- Hodge, C.T. 1992. Consonant Ablaut in Egyptian. *Discussions in Egyptology* 23. 15-22.
- Hodge, C.T. 1994. Some proto affixes. In Becker-Makkai, V. (ed.), *The Twentieth LACUS Forum 1993*, 526-536. Chapel Hill: (publisher not indicated).
- Hoffmann, C. 1955. Zur Sprache der Cibak. In Lukas, J. (ed.), *Afrikanistische Studien*, 118-143. Berlin: Akademie-Verlag.
- Hohenberger, J. 1978. Lexikalische Gleichungen: Nilo-Hamitsch – Kuschitsch – Semitsch. *Africana Marburgensis* 11(1). 43-54.
- Holma, H. 1911. Die Namen der Körperteile im Assyrisch-Babylonischen: Eine lexikalisch-etymologische Studie. *Suomalaisen Tiedekateman Toimituksia*, sarja B, nid. 7. No. 1. 1-183.
- HSED = Orel, V.É. & Stolbova, O.V. 1995. *Hamito-Semitic etymological dictionary*. Leiden: E.J. Brill.
- Hudson, G. 1989. *Highland East Cushitic dictionary*. Hamburg: Buske.
- Ibriszimow, D. & Gimba, A.M. 1994. Glossary. In Ibriszimow, D. & Gimba, A.M. (eds.), *Bole Language and Documentation Unit: BOLDU*. Report I, 127-137. Köln: Rüdiger Köppe Verlag.
- IEW = Pokorny, J. 1959. *Indogermanisches etymologisches Wörterbuch*. Bd. I. Bern – München: Francke Verlag.
- Illič-Svityč, V.M. 1966. Iz istorii čadskogo konsonantizma: Labial'nye smyčnye. In Uspenskij, B.A. (ed.), 9-34. *Jazyki Afriki: Voprosy struktury, istorii i tipologii*. Moskva: Nauka.
- Johnstone, T.M. 1977. *Ḩarsūsi lexicon*. London: Oxford University Press.
- Johnstone, T.M. 1981. *Jibbāli lexicon*. London: Oxford University Press.
- Johnstone, T.M. 1987. *Mehri lexicon*. London: University of London.
- Jungraithmayr, H. 1961. Beobachtungen zur tschadohamitischen Sprache der Jegu (und Jonkor) von Abu Telfan (République du Tchad). *Afrika und Übersee* 45. 95-123.
- Jungraithmayr, H. 1962a. *Wörterbuch der Angas-Sprache*. MS. Marburg.
- Jungraithmayr, H. 1962b. *Wörterbuch der Goemay-Sprache*. MS.
- Jungraithmayr, H. 1963. Die Sprache des Sura (Maghavul) in Nordnigerien. *Afrika und Übersee* 47. 8-89, 204-220.
- Jungraithmayr, H. 1966. Die Laryngale ḥ und ḫ im Scha (Süd-Plateau, Nordnigerien). *Afrika und Übersee* 4. 169-173.
- Jungraithmayr, H. 1968. A comparative word list of the Ron languages (Southern Plateau, N. Nigeria). *Africana Marburgensis* 1(2). 3-12.
- Jungraithmayr, H. 1970. *Die Ron-Sprachen: Tschadohamitische Studien in Nordnigerien*. Glückstadt: Verlag J.J. Augustin.
- Jungraithmayr, H. 1971-1972. *Masa (Bongor) lexicon*. MS. Marburg (now in Frankfurt). 159 pp.
- Jungraithmayr, H. 1973. *Dictionnaire birgit-français*. MS. Marburg.
- Jungraithmayr, H. 1977. *Kofa wordlist*. MS. 18 p.
- Jungraithmayr, H. 1978. *Wörterverzeichnis Mawa-Deutsch-Französisch. Index Deutsch-Mawa. Index Französisch-Mawa*. MS. 49 p.
- Jungraithmayr, H. 1980. *Über die Mawa (Guera, Tschad): Ethnographische und linguistische Notizen*. MS. März 1980. 75 p.
- Jungraithmayr, H. 1990. *Lexique mubi-français (Tchad oriental)*. MS. Frankfurt a/M. 50 p.
- Jungraithmayr, H. (in collaboration with N.A. Galadima and U. Kleinewillinghöfer). 1991. *A dictionary of the Tangale language (Kaltungo, Northern Nigeria) with a grammatical introduction*. Berlin: Dietrich Reimer Verlag.

- Jungraithmayr, H. 2004. Das Birgit, eine osttschadische Sprache – Vokabular und grammatische Notizen. In Takács, G. (ed.), *Egyptian and Semito-Hamitic (Afro-Asiatic) Studies in Memoriam Werner Vycichl*, 342-371. Leiden: E.J. Brill.
- Jungraithmayr, H. 2020. *Die „grüne Sahara“ – Urheimat afroasiatischer Sprachen im Zentralsahara?* Mit einem Beitrag von Gábor Takács (Uni im Café, Neue Literarische Gesellschaft Marburg 27). Marburg an der Lahn: Verlag Blaues Schloss.
- Jungraithmayr, H. & Adams, A. 1992. *Lexique migama*. Berlin: Dietrich Reimer Verlag.
- Jungraithmayr, H. & Ibriszimow, D. 1993. *Sur les langues sarwa, gadang et miltu (Groupe sibine/sumray)*. MS. (Paper presented at the meeting of Groupe d'Études Tschadiques (Paris).)
- Jungraithmayr, H. & Ibriszimow, D. 1994. *Chadic lexical roots*. Vol. I. *Tentative reconstruction, grading, distribution and comments*. Vol. II. *Documentation*. Berlin: Dietrich Reimer Verlag.
- Jungraithmayr, H. & Ibriszimow, D. 1994. *Chadic lexical roots*. Vol. II. *Documentation*. Berlin: Dietrich Reimer Verlag.
- Jungraithmayr, H. & Shimizu, K. 1981. *Chadic lexical roots*. Vol. II. *Tentative reconstruction, grading and distribution*. Berlin: Verlag von Dietrich Reimer.
- KB = Koehler, L. & Baumgartner, W. 1994-2000. *The Hebrew and Aramaic lexicon of the Old Testament*. Vols. I-V. Leiden: E.J. Brill.
- KHW = Westendorf, W. 1977. *Koptisches Handwörterbuch*. Heidelberg: Carl Winter Universitätsverlag.
- Kidda, M.E. 1985. *Tangale phonology: A descriptive analysis*. Urbana, Illinois: University of Illinois at Urbana-Champaign. (Doctoral dissertation.)
- Kraft, Ch.H. 1981. *Chadic wordlists*. Vols. I-III. Berlin: Dietrich Reimer Verlag.
- Lamberti, M. & Sottile, R. 1997. *The Wolayta language*. Köln: Rüdiger Köppe Verlag.
- Lane, E.W. 1863-93. *An Arabic-English lexicon*. Vols. I-VIII. London & Edinburgh: Williams and Norgate.
- Lanfry, J. 1973. *Ghadames. II. Glossaire*. Alger: Le Fichier Periodique.
- Laoust, E. 1920. *Mots et choses berbères*. Paris: Challamel.
- Leger, R. 1992. Sprachproblem aus dem Westtschadischen. Kupto- und Kwamitexte. *Afrikanistische Arbeitspapiere* 28. 5-32.
- Leger, R. 1993. Die Geschichte der Kwami nach einer Erzählung von Yerma Buba mit grammatischen Erläuterungen. *Mitteilungen des Sonderforschungsbereichs* 268. 143-177.
- Lenssen, T. 1984. Studien zum Verb im Kwang (Tschad). *Africana Marburgensia*, Sonderheft 8.
- Leslau, W. 1938. *Lexique sogotri (sudarabique moderne), avec comparaisons et explications étymologiques*. Paris: Librairie C. Klincksieck.
- Leslau, W. 1979. *Etymological dictionary of Gurage (Ethiopic)*. Vol. III. *Etymological Section*. Wiesbaden: Otto Harrassowitz.
- Leslau, W. 1987. *Comparative dictionary of Ge 'ez (Classical Ethiopic)*. Wiesbaden: Otto Harrassowitz.
- Leslau, W. 1988. Observations on Sasse's vocabulary of Burji. *Afrika und Übersee* 71. 177-203.
- Leus, T. & Van de Loo, J. & Cotter, G. 1992. *A vocabulary Oromo-English*. Debre Zeit: Bole Press.
- Lienhard, R. & Giger, M. 1975. *Daba (parler de Pologozom). Description phonologique*. Yaoundé: Société Internationale de Linguistique.
- Lukas, J. 1936. Die Logone-Sprache im Zentralen Sudan. *Abhandlungen für die Kunde des Morgenlandes* 21(6).
- Lukas, J. 1937. *Zentralsudanische Studien*. Abhandlungen aus dem Gebiet der Auslandskunde, Hansische Universität, Reihe B, Band 45/24.
- Lukas, J. 1941. *Deutsche Quellen zur Sprache der Musgu in Kamerun*. Berlin: Dietrich Reimer Verlag.
- Lukas, J. 1964. Das Hitkalanci, eine Sprache um Gwoza (Nordostnigerien). *Afrika und Übersee* 48. 81-114.
- Lukas, J. 1970. *Studien zur Sprache der Gisiga (Nordkamerun)*. Hamburg: Verlag J.J. Augustin.
- Lukas, J. 1971. Die Personalia und das primäre Verb im Bolanci (Nordnigerien). Mit Beiträge über das Karekare. *Afrika und Übersee* 55. 114-139.
- Lukas, J. 1977. Tschadische Studien I. Beiträge zur Kenntnis des Mokulu. *Afrika und Übersee* 60. 1-58, 182-229.
- MacKenzie, D.N. 1971. *A concise Pahlavi dictionary*. London: Oxford University Press.
- Matsushita, Sh. 1972. *An outline of Gwandara phonemics and Gwandara-English vocabulary*. Tokyo: Tokyo Press.
- Meinhof, C. 1906. Linguistische Studien in Ostafrika. Fortsetzung. *Mitteilungen des Seminars für Orientalische Sprachen* 9. 278-333.
- Mouchet, J. 1950. Vocabulaires comparatifs de quinze parlers du Nord-Cameroun. *Bulletin de la Société d'Études Camerounaises* 29-30. 5-74.

- Mouchet, J. 1966. *Le parler daba: Esquisse grammaticale précédée d'une note sur l'ethnie daba, suivie de lexiques daba-français et français-daba*. Yaoundé: R.E.C.
- Mukarovsky, H.G. 1966. West African and Hamito-Semitic languages. *Wiener Völkerkundliche Mitteilungen* 13. 9-36.
- Mukarovsky, H.G. 1987. *Mande-Chadic common stock: A study of phonological and lexical evidence*. Wien: Afro-Pub.
- Netting, R.M. 1967. *Kofyar vocabulary*. MS.
- Newman, P. 1964. A word list of Tera. *Journal of West African Languages* 1(2). 33-50.
- Newman, P. 1977. Chadic classification and reconstructions. *Afroasiatic Linguistics* 5(1). 1-42.
- Nicolas, F. 1957. Vocabulaires ethnographiques de la Tamâjeq des Iullemmeden de l'est (Touâreg de la Colonie du Niger, Afrique Occidentale Française). *Anthropos* 52. 49-63, 564-580.
- Nöldeke, Th. 1910. *Neue Beiträge zur semitischen Sprachwissenschaft*. Strassburg: Karl J. Trübner.
- Orel, V.É. 1993. Mir semito-hamitov. In *Principy sostavlenija étimologičeskikh i istoričeskikh slovarej raznyh semej: Tezisy dokladov konferencii 8-9 nojabrja 1993 g.*, 37-44. Moskva: Institut Jazykoznanija Rossijskoj Akademii Nauk.
- Orel, V.É. & Stolbova, O.V. 1990. K rekonstrukcii praafraijskogo vokalizma. 3-4. *Voprosy Jazykoznanija* 2. 75-90.
- Orel, V.É. & Stolbova, O.V. 1992. On Chadic-Egyptian lexical relations. In Shevoroshkin, V. (ed.), *Nostratic, Dene-Caucasian, Austric and Amerind*, 181-203. Bochum: Brockmeyer.
- Paradisi, U. 1960. Il berbero di Augila: Materiale lessicale. *Rivista degli Studi Orientali* 35(3-4). 157-177.
- Parker, E.M. & Hayward, R.J. 1985. *An Afar-English-French dictionary (with grammatical notes in English)*. London: School of Oriental and African Studies, University of London.
- PL = Wilson, P. 1997. *A Ptolemaic lexikon: A lexicographical study of the texts in the Temple of Edfu*. Leuven: Peeters.
- PN = Ranke, H. 1935, 1952. *Die ägyptischen Personennamen*. Bd. I. *Verzeichnis der Namen*. Bd. II. *Einleitung. Form und Inhalt der Namen. Geschichte der Namen. Vergleiche mit anderen Namen. Nachträge und Zusätze zu Band I. Umschreibungslisten*. Hamburg: Verlag von J.J. Augustin.
- Prasse, K.-G. 1969. *A propos de l'origine de h touareg (tahaggart)*. Det Kongelige Danske Videnskabernes Selskab. Historisk-filosofiske Meddelelser 43(3).
- Prasse, K.-G. & Alojaly, Gh. & Mohamed, Gh. 1998. *Lexique touareg-français*. Copenhague: Museum Tusculanum Press, Université de Copenhague.
- Prasse, K.-G. & Alojaly, Gh. & Mohamed, Gh. 2003. *Dictionnaire touareg-français (Niger)*. Copenhagen: Museum Tusculanum Press, University of Copenhagen.
- PT = Sethe, K. 1908, 1910. *Die altägyptischen Pyramidentexte*. Bde. I-II. Leipzig: J.C. Hinrichs'sche Buchhandlung.
- Rapp, E.L. & Benzing, B. 1968. *Dictionary of the Glavidá language*. Frankfurt am Main: Bible Society Frankfurt am Main.
- RdE = *Revue d'Égyptologie* (Paris).
- Reinisch, L. 1884. Die Chamirsprache in Abessinien. II. Chamir-deutsches Wörterbuch. *Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften. Phil.-hist. Classe* 106. 330-450.
- Reinisch, L. 1885. Die Quaraspache in Abessinien. II. Quarisch-deutsches Wörterbuch. *Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften. Phil.-hist. Classe* 109(1). 3-152.
- Reinisch, L. 1886. Die 'Afar-Sprache. II. *Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften. Phil.-hist. Classe* 113(2). 795-916.
- Reinisch, L. 1887. *Wörterbuch der Bilin-Sprache*. Wien: Alfred Hölder.
- Reinisch, L. 1890. *Wörterbuch der Saho-Sprache*. Wien: Alfred Hölder.
- Reinisch, L. 1895. *Wörterbuch der Bedawye-Sprache*. Wien: Alfred Hölder Verlag.
- Reinisch, L. 1902. *Die Somali-Sprache. II. Wörterbuch*. Wien: Alfred Hölder Verlag.
- Reinisch, L. 1904. Der Dschäbärtidialekt der Somalisprache. *Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften* 148(5). 1-88.
- Rossing, M.O. 1978. *Mafa-Mada: A comparative study of Chadic languages in North Cameroun*. Wisconsin: University of Wisconsin-Madison. (Doctoral dissertation.)
- Sachnine, M. 1982. *Dictionnaire lamé-français. Lexique français-lamé*. Paris: SELAF.
- Sasse, H.-J. 1981. Neue Perspektiven im Afroasiatischen? In Herrmann, Jungraithmayr & Miehe, Gudrun (eds.), *Berliner Afrikanistische Vorträge. XXI. Deutscher Orientalistentag, Berlin 24.-29. März 1980*, 145-165. (Marburger Studien zur Afrika- und Asienkunde, Serie A, Band 28). Berlin: Verlag von Dietrich Reimer.

- Sasse, H.-J. 1982. *An etymological dictionary of Burji*. Hamburg: Helmut Buske Verlag.
- Schuh, R.G. 1978. *Bole-Tangale languages of the Bauchi area (Northern Nigeria)*. Berlin: Dietrich Reimer.
- Schuh, R.G. 1981. *A dictionary of Ngizim*. Berkeley, California: University of California.
- Schuh, R.G. 1984. West Chadic vowel correspondences. In Bynon, J. (ed.), *Current progress in Afro-Asiatic linguistics*, 167-223. Amsterdam: John Benjamins.
- SD = Beeston, A.F.L. & Ghul, M.A. & Müller, W.W. & Ryckmans, J. 1982. *Sabaic dictionary (English-French-Arabic). Dictionnaire sabéen (anglais-français-arabe)*. Louvain-la-Neuve/Beyrouth: Peeters/Librairie du Liban.
- SED I = Kogan, A. & Militarev, A. (with assistance of Belova, A. & Kovalev, A. & Nemirovskaja, A. & Nosnitsyn, D.). 2000. *Semitic etymological dictionary*. Vol. I. *Anatomy of man and animals*. Münster: Ugarit-Verlag.
- Siebert, R. 1994. Languages of the Abbaya/Chamo area – Report Part I (with notes on Koorete by L. Hoeft). *Survey of Little-Known Languages of Ethiopia (S.L.L.E.) Reports* 21. 1-24.
- Sirlinger, E. 1937. *Dictionary of the Goemay language*. Jos, Nigeria: Prefecture Apostolic of Jos.
- SISAJa I-III = D'jakonov, I.M. & Belova, A.G. & Četveruhin, A.S. & Militarev, A.Ju. & Porhomovskij, V.Ja. & Stolbova, O.V. 1981-1986. *Sravnitel'no-istoričeskij slovar' afrazijskih jazykov*. Vypusk 1-3. Pis'mennye pamjatniki i problemy istorii kul'tury narodov Vostoka. XV-XIX godičnaja naučnaja sessija Leningradskogo Otdelenija Instituta Vostokovedenija Akademii Nauk SSSR. Moskva: Nauka.
- Skinner, M.G. 1979. *Aspects of Pa'anci grammar*. Madison: University of Wisconsin, Madison. (Doctoral dissertation.)
- Skinner, N. 1977. North Bauchi Chadic languages: Common Roots. *Afroasiatic Linguistics* 4(1). 1-49.
- Skinner, N. 1996. *Hausa comparative dictionary*. Köln: Rüdiger Köppe Verlag.
- Smith, T. 2003. *Muyang provisional lexicon*. Cameroun: SIL.
- Steingass, F. 1892. *A comprehensive Persian-English dictionary, including the Arabic words and phrases to be met with in Persian literature*. London: Routledge & K. Paul.
- Stolbova, O.V. 1987. Sravnitel'no-istoričeskaja fonetika i slovar' zapadnočadskih jazykov. In Porhomovskij, V.Ja. (ed.), *Afrikanskoe istoričeskoe jazykoznanie: Problemy rekonstrukcii*, 30-268. Moskva: Nauka.
- Stolbova, O.V. 1996. *Studies in Chadic comparative phonology*. Moscow: "Diaphragma" Publishers.
- Strümpell, F. 1922-1923. Wörterverzeichnis der Heidensprachen des Mandara-Gebirges (Adamaua). *Zeitschrift für Eingeborenen-Sprachen* 13. 109-149.
- Taïfi, M. 1991. *Dictionnaire tamazight-français (parlers du Maroc central)*. Paris: L'Harmattan-Awal.
- Taine-Cheikh, C. 2008. *Dictionnaire zénaga-français: Berbère de Mauritanie*. Köln: Rüdiger Köppe Verlag.
- Takács, G. 1994. Nominal lexical categories in Egyptian. *Mother Tongue* (Boston) 23. 67-69.
- Takács, G. 1995. Traces of nominal lexical categories in Egyptian. *Lingua Posnaniensis* 37. 99-103.
- Takács, G. 1997. The common Afrasian nominal class marker \*ḥ. *Studia Etymologica Cracoviensia* 2. 241-273.
- Takács, Gábor. 1999. *Development of Afro-Asiatic (Semitic-Hamitic) comparative-historical linguistics in Russia and the former Soviet Union*. München – Newcastle: Lincom Europa.
- Takács, G. 2004. *Comparative dictionary of the Angas-Sura languages*. Berlin: Dietrich Reimer Verlag.
- Takács, Gábor. 2006a. Otto Rössler's new system of Egypto-Semitic consonant correspondences. Part One. *Rocznik Orientalistyczny* 59(2). 90-127.
- Takács, G. 2006b. Angas-Sura etymologies III. *Lingua Posnaniensis* 48. 121-138.
- Takács, G. 2022. Omotic lexicon in its Afro-Asiatic setting IV: Addenda to Omotic \*b-. *Acta Orientalia Acad. Scient. Hung.* 75(1). 123-164.
- Thiene, G. da. 1939. *Dizionario della lingua Galla con brevi nozioni grammaticali*. Harar: Vicariato Apostolico.
- Till, W.C. 1955. *Koptische Grammatik: Saïdischer Dialekt*. Leipzig: Otto Harrassowitz.
- Tosco, M. 2001. *The Dhaasanach language: Grammar, texts, vocabulary of a Cushitic language of Ethiopia*. Köln: Köppe.
- Tourneux, H. 1978a. *Le mulwi ou vulum de Mogroum (Tchad): Langue du groupe musgu – famille tchadique*. Paris: Centre National de la Recherche Scientifique (CNRS).
- Tourneux, H. 1978b. Racine verbale en mulwi. In Caprile, J.-P. & Jungreithmayr, H. (eds.), *Préalables à la reconstruction du proto-tchadique*, 89-93. Paris: SELAF.
- Tourneux, H. 1991. *Lexique pratique du munjuk des rizières: Dialecte de Pouss*. Paris: Librairie Orientaliste Paul Geuthner.
- Tourneux, H. & Seignobos, Ch. & Lafarge, F. 1986. *Les Mbara et leur langue (Tchad)*. Paris: Société d'Études Linguistiques et Anthropologiques de France.

- Tsuge, Y. 1996. 7. On the consonant correspondences of South Omotic languages. In Shun Sato & Eisei Kurimoto (eds.), *Essays in Northeast African Studies* (Senri Ethnological Studies, No. 43), 163-188. Osaka: National Museum of Ethnology.
- Voigt, R.M. 1998. Vergleichende Tschadistik heute – Fortschritte in der tschadischen und semitohamitischen Komparatistik. Besprechung von Jungraithmayr, H. & Ibriszimow, D.: Chadic Lexical Roots. Vols. I-II. *Orientalistische Literaturzeitung* 93(6). 607-619.
- Vycichl, W. 1934. Hausa und Ägyptisch: Ein Beitrag zur historischen Hamitistik. *Mitteilungen des Seminars für Orientalische Sprachen an der Friedrich-Wilhelms-Universität zu Berlin* 37. 36-116.
- Vycichl, W. 1958. Grundlagen der ägyptisch-semitischen Wortvergleichung. *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo* 16. 367-405.
- Vycichl, W. 1983. *Dictionnaire étymologique de la langue copte*. Leuven: Peeters.
- Ward, W.A. 1978. *The four Egyptian homographic Roots b3*. Rome: Biblical Institute Press.
- Watson, W.G.E. 1993. Ugaritic Onomastics (3). *Aula Orientalis* 11. 213-222.
- Wb = Erman, A. & Grapow, H. 1957-1971. *Wörterbuch der ägyptischen Sprache*. Bde. I-V.<sup>2</sup> Berlin: Akademie-Verlag.
- WD = Lapp, G. & Lüscher, B. 2002-3. *Wortdiskussionen*. Provisorische Ausgabe. Bde. I-III. (Place & publisher not indicated).
- Wolff, E. 1983. Reconstructing vowels in Central Chadic. In Wolff, E. & Meyer-Bahlburg, H. (eds.), *Studies in Chadic and Afroasiatic linguistics*, 211-232. Hamburg: Helmut Buske Verlag.
- WUS = Aistleitner, J. 1963. *Wörterbuch der ugaritischen Sprache*. Berichte über die Verhandlungen der Sächsischen Akademie der Wissenschaften zu Leipzig. Phil.-hist. Klasse 106(3).
- Zaborski, A. 1971. Biconsonantal verbal roots in Semitic. *Zeszyty Naukowe Uniwersytetu Jagiellońskiego. Prace językoznawcze* 5. 51-98.
- Zaborski, A. 1975. Material for a comparative dictionary of Cushitic languages: Somali-Galla Comparisons. In Bynon, J. & Bynon, Th. (eds.), *Hamito-Semitic*, 321-331. The Hague: Mouton.