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The Law of Belova in Work

Working on Egyptian etymologies in the future, we will have to account for the “Law of Belova”, which is undoubtedly one of the most significant observations on Egyptian historical phonology of the latest time. This law has been published only recently (Belova 1987, 278–282; 1991; 1993, 51–55; Diakonoff 1988, 55, note 10). The name of the law was given by I. M. Diakonoff after the name of its observer.

According to this rule, the first *w-* and *j-* in Eg. triconsonantal roots cannot be always treated as morphological prefixes, but in many cases rather reflect the original PAA internal root vocalism **-u-*, **-i-* (i.e. Eg. *wC₁C₂* and *jC₁C₂* < AA **C₁uC₂-* and **C₁iC₂-* respectively). As for PAA (*C₁aC₂-*, it may eventually yield Eg. *jC₁C₂*, but *3C₁C₂* as well though the examples for it are of very limited number).

Working on the planned *Etymological Dictionary of Egyptian* in the recent years (its first volume: *b-, p-, f-, m-* forthcoming), I can claim that since then Belova’s law has proven valid in a great number of new cases of its occurrence. Though Belova’s well founded and firm arguments based on reliable Semitic and Afroasiatic correspondences need in fact no further justification, I would like to offer here a considerable amount of new *addenda*, a further confirmation of her brilliant idea:

I. New Examples of the Law of Belova

1. Eg. *jbȝ* ‘tanzen’ (OK, Wb I 62, 8) < **biȝ* = **bi1-* preserved also in **HECu.**: Burji *beléel-* ‘dance’ (noun) [Sasse 1982, 35] ||| **WCh.**: Sura *bél* ‘Tanz’ [Jungraithmayr 1963, 60] || ?**ECh.**: cf. Kwang *bér kén* ‘tanzen’, Mokilko *bérè* ‘Tanz’ [Mukarovsky 1987, 138].

NB: Eg. has been mistakenly equated with **Sem.** **l'b*: Hb. *l'b* ‘spotten’, Aram. *l'b* ‘Lust an etwas haben’, Ar. *la'iba* ‘spielen, scherzen’ (cf. Behnke 1927, 81, #4;

Calice 1936, #7; Vergote 1945, 128, #1.b.1), what cannot be justified either in the phonology and the semantics.

2. Eg. *jmn* ‘bilden, schaffen’ (Pyr., Wb I 83, 4) < **min* = **min-* preserved in **Bed.** *mine* ‘to create’ || **Agaw** **yən* ‘house’ < **min* [Bender-Fleming 1976, 41; Appleyard 1984, 45; 1989, 6; 1991, 20, 23] || **ECu.**: Sidamo *min-* ‘costruire (una capanna)’ [Cerulli] and PECu. **min-* ‘house’ [Sasse 1979, 24; 1982, 145]; PSam **min* ‘house’ [Heine 1976, 216; 1977, 288; 1978, 91] and HECu. **mine* ‘house’ [Conti Rossini 1913, 420; Moreno 1937, 238; Leslau 1988, 195; Hudson 1989, 418] || **SCu.** **min-* ‘house’ [Ehret 1980, 158] ||| **WCh.**: Bole-Tangale gr. **mina* ‘hut’ [Stolbova 1987, 247].

See also Cerulli 1938 II, 214; Greenberg 1955, 59; 1963, 58; Dolgopol'sky 1967, 10, #8; Ehret 1987, 104, (PCu. **min-*); Orel-Stolbova 1989, 88; Militarev-Orel-Stolbova 1989, 153.

3. Eg. *jnr* ‘Stein’ (OK, Wb I 97–98) < **nir*/**nar* = **Berb.**: Ahaggar *a-nanar* ‘enclos maisonné’ ||| **NOm.**: Dime *lālo*, Maji *ñal-u*, Nao *niol-u*, Benesho *ñel* ‘stone’ [Bender-Fleming 1976, 49], Jeba of Dizi *lyal-u* ‘stone’ [Fleming 1990, 29] ||| **WCh.**: PAngas **lar* ‘stone’: Sura *lar*, Angas *ler* [Stolbova 1987, 243]. See Orel-Stolbova 1992, 172 (Cu.-NOm.-Eg.-WCh.); Starostin etc. 1995, 25 (Eg.-Berb.-NOm.-WCh.).

NB: the comparison of Eg. with **Sem.** **'abn-* ‘stone’ has no real bases (cf. Bender 1975, 188; Vycichl 1975, 203).

4. Eg. *jns* ‘das Rote (Blut?)’ (neben *dšr* ‘Blut’, Pyr., Wb I 100, 4), *jns.j* ‘hellroter Leinenstoff’ (OK, Wb I 100, 6) < **nis* = **CCh.**: Hwona *nyìs* ‘red’ [Kraft 1981 II, 17]. For the Eg.-Hwona comparison see Orel-Stolbova 1992, 201; HSED # 1859.

5. Eg. *jšf* ‘etwas verbrennen’ (XX., Wb I 135, 2) < **sif* = **CCh.**: Bachama *šifa* ‘to boil’ [Skinner 1977, 13] ||| **Berb.**: Shilh *a-séfu* ‘Brennscheit’ [Behnke 1928, 140, #47: Eg.-Shilh].

6. Eg. *jtn* ‘Sonne’ (MK, Wb I 145, 1–8) < **tan* = **WCh.** **talV* ‘sun’: Hausa *tàllī* ‘блеск’, *tal* ‘ярко’, ‘блестяще’ | Galambu *təryí* | PSBauchi **tali*: Boghom *tàál*, Kir *tààl*, Lar, Mangas *taal*, Tule *čàlī*, Chari *čàli*, Lushi *čal*, Dwot *čerá* (‘light’), Zakshi *čàlə* [Mukarovsky 1987, 359; 1995, 72; Stolbova 1987, 167] ||| **Sem.**: cf. Ar. *taliy-* ‘блестки’ [SISAJa II, 25, #48].

7. Eg. *jtr.t* ‘(ursprünglich wohl Palast des Königs) Götterwohnung, Tempel’ (OK, Wb I 147–148) < **tir* = **ECh.** **tir-* ‘house’: Kwang *tər* | Somrai *číré* [Orel-Stolbova 1989, 133]. For the Eg.-ECh. comparison see Militarev-Orel-Stolbova 1989, 157; HSED #2404.

8. Eg. *jth* ‘ziehen’ (Pyr., Wb I 148, 12–23) < **tah* = **CCh.**: Lame-Peve *ta*’, Musgum *ta* ‘to pull’ ||| cp. also **PSem.** **th* ‘to stretch, spread’: esp. Ar. *thy* ‘to stretch out, throw’ [the PSem. biconsonantal root was reconstructed by Zaborski 1971, #263]. As for the equation of Eg. with CCh. see Orel-Stolbova 1992, 197; HSED #116. As for Eg.-Sem. see Albright 1918, 95; 1918, 220, #15; Ward 1962, 407.

9. Eg. *jdb* ‘Ufer (land)’ (OK, Wb I 153, 2–10) < **dib* = Bed. *dībba* ‘mound of earth (soil, sand), bank, moving sandhill’ [Roper 1928, 168; Reinisch 1895, 59: ‘Hügel’; Dolgopol’skij 1973, 50: ‘plateau’) || Agaw: Bilin *dibba* Qwara *deba* etc. ‘Wald, Berg’ [Zaborski 1989, 585, #53]. See also Orel-Stolbova 1992, 172 (Eg.-Cu.).

10. Eg. *jdm.j* ‘Leinenstoff von roter Farbe’ (OK, Wb I 153, 14) < **dam* = Sem. **dam-* ‘blood’ ||| Berb. **i-damm-en* ‘blood’ (pl.) [Basset 1887, 426; Militarev 1991, 253, #9.1] III WCh. **damV* ‘blood’ (whence **dumV* influenced by *-m-) [Newman Ma 1966, 232; Newman 1977, 22; Stolbova 1987, 171] etc.; unless Eg. has the same prosthetic *- as the Sem. root **'dm* ‘rot sein’ [WUS #84]. See Zaborski 1971, #36; Vycichl 1974, 62; 1978, 64; Müller 1975, 65, #17; Rössler 1979, 21; Dolgopolsky 1982, 32; Orel-Stolbova 1988, 74; Mukarovský 1989, 1 etc.

Still another possibility is that also here we are dealing with the development *jdm-* < **dim*, cf. HECu. **dim-* ‘red’ [Sasse 1982, 59] || SCu. *[*djima* ‘red’ [Ehret 1980, 325; 1987, 18].

11. Eg. *w3h* ‘dauern: to live long, endure’ (MK, Wb I 255; FD 54) < **3uh* = Sem. **rwh* ‘to be wide, spacious, distant’: Hb.-Ar. *rwh* [Reinisch 1890, 34; reconstruction see in Illič-Svityč 1965, 373; Dolgopolsky 1970, 621, #30].

12. Eg. *w3sj* ‘verfallen sein: to be ruined, decayed’ (OK, Wb I 260–261) < **3us* = WCh. **rus-/raws-* ‘to destroy’: Hausa *rúsà*, *ruše* | Bolewa *ruš* | Kulere *ryaas ti* (‘zerbrechen’) | Ngizim *ràasú* [Illič-Svityč 1965, 358; Stolbova 1987, 236, #830; Orel-Stolbova 1988, 72, #51].

13. Eg. *wbs* ‘die Garben zu Kornmieten zusammenhäufen’ (OK, Wb I 296, 13) < **bus* = ECu. **buus-*: Oromo *buus-* ‘to throw down’, *buusa* ‘to fill up’, Gidole *puus-* ‘to place down money in a bet’, cf. Burji *buus-* ‘to thresh’ [Sasse 1982, 44–45; Starostin etc. 1995, 13].

14. Eg. *wbg* ‘leuchten, scheinen (von der Sonne)’ (NK, Wb I 296, 14–15) < **bug* = Sem.: Ar. *bẉž* > *tabawwaža* ‘glänzen’ [Albright 1927, 210 and Calice 1936, #18: Eg.-Ar.].

15. Eg. *wp.t* (for **wpw.t?*) ‘Gehörn, Scheitel’ (OK, Wb I 297–298) < **puw* = Sem.: Akk. *pū-t-* ‘Stirn(seite)’ [AHW 884] (for its supposed Sem. etymology see Leslau 1945, 234; Appleyard 1977, 13/55) ||| WCh.: Bade *fùw-áan* ‘Horn’ [Lukas 1968, 223]. For the Akk.-Eg. equation see also HCVA 1, #42.

16. Eg. *wpš* ‘erleuchten’ (Pyr., Wb I 305, 11–19), *wpš* ‘Licht’ (Pyr., Wb I 306, 1) < **puš* = WCh.: Sura-Angas gr. ‘sun’: Angas, Sura, Kofyar *puus*, Montol *pəγəs* (-γ- secondary [cf. Dolgopolsky 1982]), while Montol *puus* ‘sun’ must have been borrowed: [Jungraithmayr 1963, 79; 1965, 160; Stolbova 1977, 156; Mukarovský 1987, 359–360]. The inner Chadic affiliation of the Sura-Angas stem offered by Stolbova (1977, 65; 1987, 145; SISAJa I, 15, #10) and Mukarovský (1987, 359–360) is unconvincing.

17. Eg. *wf3* ‘Lunge’ (BD, Wb I 306, 3) < **fu3* = **WCh.**: Mupun *fūl-fūk* ‘lung’ [Frajzyngier 1991, 18]. Cf. PWNigritic **phul-*/**phulphul-* ‘lungs’ [Shimizu 1981, 16, #70].

18. Eg. *wf3* ‘to talk about, discuss’ (MK, FD 60; Wb I 306, 4) < **fu3* = **WCh.** **pur-* ‘to speak’: Hausa *fúrtà* | Bolewa *por, poru*, Maha *pori* [Stolbova 1987, 147; Mukarovský 1987, 346]. For the identification of Eg. *wf3* with Chadic see already Hodge 1981, 373, #26.

19. Eg. *wft* ‘durchbohren’ (Med., Wb I 306, 7) < **fut* = **Sem.**: Hb. *pot* ‘vulva’ and also ‘Türangelloch’, Ar. *fawt-* ‘Zwischenraum’ ||| **ECu.**: Somali-Isaq *fút-o* ‘anus’, Oromo *fut-ē* ‘anus’, *fuč-i* ‘vulva’ ||| **NOm.**: Ganjule *pote* ‘vagina’ ||| **WCh.**: Angas *fut* ‘deep hole’. See Cohen 1947, 171, #381; Illič-Svityč 1966, 24, #2.26; 1966, 319; Dolgopol’skij 1966, 61; 1973, 247; 1983, 126; 1994; Müller 1975, 64–65; SISAJa I, #136; Blažek 1989, 30, #105; Takács 1996, 130, #14; 1996a, 123, #20.

20. Eg. *wh3.t* ‘Kessel zum Kochen’ (OK, Wb I 347, 12) < **hu3* = **Sem.**: Ar. *hull-at-* ‘Kessel (zum Kochen)’. See Ember 1930, #3.c.21; Vergote 1945, 130, #1.d.8 (Eg.-Ar.).

21. Eg. *whj.t* ‘Familie, Sippe’ (MK, Wb I 346, 9) < **huj* = **Sem.** *ithwy*: Hb. *hayyā* ‘village, crowd’, *ḥāwā* ‘population of village’, Ar. *hwyl* ‘to collect, assemble’, *hiwā-* ‘collection of houses’, *hayy-* (**hawy-*) ‘tribe’. For Eg.-Sem. see Ember 1911, 93; Vergote 1945, 138, #12.a.1; Militarev 1984, 16.

22. Eg. *wsr* ‘mächtig, stark’ (OK, Wb I 360–362), *wsr* ‘Macht, Reichtum’ (OK, Wb I 365–363) < **sur* = **ECu.** *šor-* ‘rich’ [Sasse 1979, 33], cf. PSam **suur-* ‘good’ [Heine 1978, 110] ||| **WCh.**: ?Gwandara *čori* ‘strength’ ||| ?**Sem.** **tawr-* ‘bull, ox’ (act. *‘strong’?). See Orel-Stolbova 1992, 201; HSED #489 (Eg.-Dwandara); Blažek 1994, 14, #73 (ECu.-Eg.).

23. Eg. *wgj.t* ‘Unterkiefer, Kinnlade’ (OK, Wb I 376, 3–5) < **guj* = **CCh.**: Lamang (Hitkala) *góyó* ‘chin’ [Lucas 1964, 107] | Zeghwana *gwiye*, Glavda, Gvoko, Bokwa *gwiya*, Gava *guya*, Alataghwa *gwuya*, Nakaci *gwiya*, Dghwede *gwiye* ‘beard’ [Büchner 1964, 43–44]. Cf. with a different vocalism: **LECu.** **gaw-* ‘jaw’: Konso *kawkawwá* (pl.), Gawayada *kawkawwe* [Lamberti 1987, 533] ||| **Berb.** **a-ggay* ‘mâchoire’ [Wölfel 1955, 43: Berb.-Eg.]. See Orel-Stolbova 1992, 185; HSED #990 (Eg.-CCh.).

24. Eg. *wtn* ‘durchbohren’ (NE, Wb I 380, 10–11) < **tun* = **CCh.**: Fali-Jilbu *tula-*, Mwulyen *utulo* ‘to pierce’ ||| cf. **SCu.**: Qwadza *tul-as-* ‘to split into two’. See Orel-Stolbova 1992, 197; HSED #2419.

25. Eg. *wdb* ‘Ufer (land)’ (Pyr., Wb I 409, 2–7) < **dub* (from **gub*) = **ECu.** **gub-* ‘mountain’ [Sasse 1979, 15; 1982, 85]: Burji *gúbba* ‘highland’, Darasa *koba* ‘Hügel’ | Afar *gubbi* ‘Hügel’, Oromo *gubbaa* ‘über, auf’ and *Gipfel*, Dullay *g’upo* ‘Berg’ [Zaborski 1989, 585, #53] ||| **CCh.**: cp. Guduf *γubà*, *γùba* ‘Berg’ [Mukarovský 1987, 40]. For the rather late semantic shift ‘hill’ > ‘(Nile) bank’ in Eg. cp. Eg. *jdb* above.

II. Comments on some of Belova's examples

After the new evidence supporting Belova's law, I would like to use the opportunity to return to five examples of Belova's original material, which need some further addition or which are not fully evident.

1. Eg. *w3d* 'grün sein, gedeihen' (OK, Wb I 264–266), whence *w3d.t* 'Gemüse, Grünzeug' (NE, Wb I 266, 13) < **3ud* = **Sem.**: Ar. *rawd-at-* 'Grünfleck, Garten' is correct (see Cohen 1947, #431; Belova 1989, 19, note 9; 1991, 87, #8; 1993, 52).

Add perhaps Syr. *rū‘ānā* (Sem. **rawd-*) 'Malve' [Brockelmann 1932, 103, #18: Eg.-Sem.], and ESA *rd* (pl.?) 'Weide' [Belova 1994, 73, #1.2.4].

Belova mentioned also the old idea of combining Eg. *w3d* with Sem. **wrq* 'to be green/yellow', which, however, can be no means have anything in common as traditionally held [Ember 1912, 87; Vycichl 1957, 72; Knudsen 1962, 34; Rössler 1966, 227; 1983, 333], since the third consonants do not correspond (Eg. *d* = Sem. **g* or **s*, **t*, **d*). It is very unfortunate that this old mistake has some recent proponents as well [Loprieno 1994, 120; Orel 1994, 9; HSED #2560]. The correct cognate for **Sem.** **wrq* is **Eg.** *j3q.t* 'Grünzeug, Gemüse' [MK, Wh I 34, 1–2], as noted already by Ember 1911, 88; Vergote 1945, 128, #1.c.4; Diakonoff 1970, 472, note 85; Hodge 1976, 15, #155; Diakonoff etc. 1986, 47; Militarev 1991, 73; 1991, 263, #37.3; Belova 1991, 88, #3; 1993, 53].

2. Eg. *wnm* 'essen' (OK, Wb I 320–321), *wnm.t* 'Nahrung des Menschen' (MK, Wb I 321, 15) < **num* = **Sem.**: Ar. *nīm-at-* (**niwm-at-*) 'nourriture' [Belova 1991, 87, #9; 1993, 52: Eg.-Ar.] is perhaps correct.

Belova's logical reconstruction of underlying root as **num* can be supported, cf. **ECu.**: Elmolo *nūm* 'Speise', *nūmān* 'essen' [Heine 1973, 280, 282].

Note, however, that the etymology of Eg. *wnm* is not completely settled yet, as there arise further data to be considered.

2.1. The reason is that Eg. *wnm* can reflect **wlm*/**lwm* as well. Thus we have to pay attention to possible alternative cognates as **Sem.**: Ar. *walima* 'speisen' (tr.), (IV) 'to banquet', *walīm-at-* 'Festmahl', Harsusi *awlōm*, Mehri *awōlem*, Shahri *ulm* 'to prepare a meal'. From the same biconsonantal root **lm* are: Ar. *lmw* 'to devour, verzehren', Akk. *lamū* (*lmy/w*) 'to eat and drink', *lamāmu* 'to chew' ||| **Bed.** *lam* 'to taste' ||| **Agaw** **lan-z-* 'to lick' (with the caus. suffix *-s-voiced) || **SCu.**: PDahalo **saam-* 'to feed' (from **laam-?*) ||| **CCh.**: Mbara *lum*, Musgum *lāma* '(feste Speise) essen' [Lukas 1941, 84] || **ECh.**: Somray *lāma* 'schmecken, kosten', Kabalay *wělmě* 'food' [Orel-Stolbova] and *liyém* 'to eat (soft things)' [Jungraithmayr-Ibriszimow 1994 II, 121].

For the Afroasiatic (incl. Egyptian) comparison see Calice 1901, 146; Albright 1927, 220 and Vergote 1945, 135, #9.b.5 (all: Eg.-Ar.); Müller 1975, 69, #66 (sem.-Ch.); Majzel'-Militarev 1983, 181 (Sem.-Eg.); HSED #1687, 2559 (Sem.-Eg.-CCh.-ECh.).

There is an opinion (Müller 1975, 69, #66; Hodge 1992, 216, #2; HSED #1687) that the Chadic data cited reflect an archetype cognate with the Sem. root **lhm* cf. Akk. *lēmu* ‘essen (und trinken), zu sich nehmen’ [AHW 543], Hebr. *lhm* ‘(Brot) essen’, *lehem* ‘Brot’, Ar. *laḥm-* ‘Fleisch’ [Leslau 1969, 19]. He suggested that the primary meaning of the root was ‘food’, which was later specialized]. One, however, wonders whether the Sem. root is a secondary extension of **lm* with an infix **-h-*, and thus also belongs to the biconsonantal root. Another extension (with *-h-*) in Ar. *lhm*: *talahhama* ‘to devour’ speaks in favour of this possibility.

2.2. Speaking of the etymology of Eg. *wnm* we must mention still a third cognate group: **ECu.**: Geleba *wom* ‘Essen’ [Habererland 1966, 97] ||| **ECh.**: Somray (Sibine) *wīm*, *wāmā*, Tumak *wóm*, *wəm* ‘essen’ [Jungraithmayr 1980, 75]. From this Cushito-Chadic isogloss a root **wm* seems to emerge. We must bear in mind Cpt. (SABF) *wōm* ‘to eat’, which is derived in Egyptology from Eg. *wnm* (see CED 212; KHW 271). Is the similarity between Coptic and the Cushito-Chadic isogloss a pure chance? Or do we have the traces of the same historical process in Cushitic and Chadic as in Coptic (i.e. assimilation of nasals: *wm* < **wmm* < **wnm*)? Its clarification needs more data.

3. The etymological interpretation of Eg. *j'f* ‘Feuchtes auspressen’ (MK, Wb I 41, 3–4) is again disputed.

Anna Belova (1991, 88, #2; 1993, 52) sees in Eg. a reflection of a former **'if* comparable to **Sem.**: Ar. *'ff* (impf. -*'fif-*) ‘s’amasser, affuer abondamment dans les pis de la femelle (du lait)’, (TA-stem) ‘traire une seconde fois’.

But the traditional etymology for Eg. *j'f* offered by Albright (1918, 221, #18); Vergote (1945, 132, #2.c) and Hodge (1991, 104) is different and just as well plausible. They consider Eg. *j'f* a result from **r'f*, which they compared with the nose), (IV) (‘to press out’, whence *ru'ūf-* ‘fine rains’).

Here we must note that one cannot agree with Dolgopolsky’s (1973, 173; 1983, 127) equation of **Sem.** **r'p* ‘tröpfeln’ with **ECu.** **roob-* ‘rain’ [see Sasse 1979, 22; Heine 1978, 72; PSam **roob*], because of the irregular sound correspondence of Sem. **-p-* ~ ECu. **-b* and the absence of the **'* on the PECu. level. What’s more, the correct Afroasiatic cognates of **ECu.** **roob-* are well known: **Sem.**: Hb. *rəbīb-īm* (pl.) ‘rain’, Ug. *rbb* ‘rain’, Amh. *räbärräbä* ‘leicht regnen’ [Müller 1975, 67, #39: Sem.-ECu.] ||| **WCh.** **rubA* ‘wet’ [Stolbova 1987, 236], add Hausa *rābā* ‘dew’ [Newman 1970, 41; HSED #2079: Hausa-ECu.-Hb.] ||| ?Eg.: was there a word **jrb3* connected with humidity/water? Cf. the suspicious and unexplainable water determinative in *jrb3* ‘Nashorn?’ (OK wb I 115, 4).

4. Eg. *wzs* ‘harnen] (OK, Wb I 357, 16–20) < **zuš* < **zuh* (interchange of Eg. *š:h* common in Eg.) = **Sem.**: Ar. *zhh* (impf. -*zhuh-*) ‘uriner’ suggested by Belova (1991, 90, #5; 1993, 54) seems correct. The Eg.-Ar. isogloss from an original root **zuh* may now be strengthened by **WCh.**: Ron gr.: Sha *zòh* [unless < **zor*] ‘urine; to urinate’ [Jungraithmayr-Ibriszimow 1994 II, 334].

4.1. But, as it can already be expected, the situation around Eg. *wzš* is again disputed. Stolbova (1991; 1994; 1995) has argued for that the Eg. consonant *al* groups *zš*, *šz*, *šs*, *sš* may represent the reflexes of an Afroasiatic unglottalized affricate, as it can reflect AA **wuč-* ‘to urinate’ as well, cf. **Berb.**: Tamashiq *ā-was* ‘urine’ [Nicolas 1957, 574] (if not < **bš*) ||| **Bed.** *ūša* ‘Harn’ (Zyhlarz 1932–1933, 166: Eg.-Bed.) ||| **CCh.**: Tera *wužiŋgin* ‘(to) urin(at)e’ || **ECh.** **wuč/-* ‘to urinate’: Kwang *wičē*, later **wuž-* in all other attested data [Jungraithmayr-Ibriszimow 1994 II, 334–335: C-ECh.]. For the comparison of Eg. with ECh. see also Stolbova 1991, 9 and HSED #2543. As areal parallel cp. PWKuliak **wac* ‘urine’ [Ehret 1981, 92].

5. Eg. *wdn* ‘schwer sein, lasten’ (OK, Wb I 390, 1–15) is even a more difficult question.

5.1. Belova (1991, 90; 1993, 54) suggests that Eg. *wdn* < **dun* = **Sem.**: Ar. *tunn-* ‘charge d’une bête de somme’ ||| **WCh.**: Angas *toon* ‘poids’ (**dōn*), cf. Sura *tóγón* ‘heaviness, weight’ (-γ- is innovation). For the Eg.-Angas comparison see already Greenberg 1963, 58, #38.

Note that Dolgopolsky (1982, 34) prefers to combine the Sura-Angas word not with Eg. but Sem. **t'�* ‘to load’.

5.2. Belova expanded her comparison to **SSem.**: Soqotri *dnw* ‘to conceive, become pregnant’. For phonological reasons, however, the **SSem.** root **dnw* ‘to conceive, become pregnant’ should be treated separately and be equated with **WCh.**: PNBauchi **n-dan-dan* ‘heaviness’ [Skinner 1977, 25].

5.3. Orel and Stolbova (1992, 201; HSED #729) combine Eg. *wdn* with **CCh.**: Chibak *děna*, Wamdiu *duno-ma*, Ngwahyi *dina*, Margi *děna-ma*, Mbara *dono*, Logone *doyon*, Buduma *dunoa*, Gulfei, Kuseri *dunu* ‘strong/strength’ [cf. also Porhomovskij 1972, 43, #22.5] || **ECh.** Somray *dwana*, Sokoro *duno* ‘strong’. Similarly, Diakonoff and his team (SISAJa II, #163) identify Eg. with **Sem.** **dnn* ‘mächtig sein’.

The semantic connection of ‘heavy’ and ‘strong’ is plausible, so we can speak about the cognateship of the roots described under #4.2 and #4.3 here. It is another question whether Eg. *wdn* is at all related to them!

5.4. As is well known, the traditionally accepted etymology connects eg. with **Sem.** **wzn* ‘to weigh’, see Ember 1911, 92; Erman and Grapow (Wb I 390); Albright 1927, 208, note 8; Cohen 1947, #508; Bobrova-Militzarev 1993, 319.

The big problem is that Sem. **z* corresponds regularly *only* to Eg. *z*. Thus we would wait Eg. **wzn* and not *wdn*. But even so this one seems the most probable etymology.

5.5. The problem of Eg. *wdn* cannot be definitely solved at present. Because of the peculiarities of Eg. hist. phonology, the number of eventual cognate candidates can still be increased. Thus Eg. *wdn* can reflect **wdl/*dul* as well, which would be supported by **Sem.**: Tigre, Amhara *wdl* ‘gross und dick’ [Rössler 1966,

228] ||| **SCu.** **d/dVI-* ‘to be heavy’ [Ehret 1987, #199] ||| **ECh.**: Sokoro *dol* ‘heavy’ [Greenberg 1963, 58, #38: Eg.-Sokoro]. For Eg. *wdn* both **wdl* (cp. Ethio-Sem.) and **dul* (cf. Sokoro) can be a possible reconstruction.

Abbreviations and special signs

(A): Ahmimic, AA: Afroasiatic (Hamito-Semitic), Akk.: Akkadian, Amh.: Amhara, Ar.: Arabic, Aram.: Aramaic (Syr.: Syrian, Jud.: Judeo-, Bibl.: Biblical), Ass.: Assyrian, (B): Bohairic, Bab.: Babylonian, BD: Book of the Dead, Bed.: Bedawye, Berb.: Berber (Libyo-Guanche), C: Central, Ch.: Chadic, CT: Coffin Texts, Cu.: Cushitic, E: East, Eg.: Egyptian, Eth.: Ethiopian, (F): Fayyuminic, Gr.: Greek and Roman Period, H: Highland, Hb.: Hebrew, Hung.: Hungarian, IE: Indo-European, L: Late or Lowland, Lat.: Latin, LP: Late Period, M: Middle, Mag.: Magical Texts, Med.: Medical Texts, MK: Middle Kingdom, N: North or New, NE: New Egyptian, NK: New Kingdom, NS: Nilo-Saharan, O: Old, OInd.: Old Indic (Sanskrit), OK: Old Kingdom, Om.: Omotic, P: Proto-, Ptol.: Ptolemaic period, Pyr.: Pyramid Texts, S: South, (S): Sahidic, Sem.: Semitic, Sid.: Sidamo, Som.: Somali, Soq.: Soqotri, Syr.: Syriac, Ug.: Ugaritic, Ur.: Uralic, W: West.

The vertical signs indicate the closeness of relationship between the various Afrasian forms under discussion. Thus ||| separates two different branches (e.g. Cushitic and Chadic); || stands between sub-branches within the same branch (e.g. West Chadic and East Chadic); | marks the limit between groups within the same sub-branch (e.g. Kotoko group and Tera group in Central Chadic).

[] brackets indicate uncertain reconstruction, while () mark a proto-phoneme omittable in the proto-form in question.

References

- AHW = W. von Soden: *Akkadisches Handwörterbuch*. Band I–III, Wiesbaden, 1965–1981, Otto Harrassowitz.
- Albright, W. F.; *Notes on Egypto-Semitic Etymology. I*, “American Journal of Semitic Languages 34/2 (1918), pp. 81–98.
- Albright, W. F.; *Notes on Egypto-Semitic Etymology. II*, “American Journal of Semitic Languages and Literatures” 34/4 (1918), pp. 215–255.
- Albright, W. F.; *Notes on Egypto-Semitic Etymology. III* “Journal of the American Oriental Society” 47 (1927), pp. 198–237.
- Appleyard, D.; *A Comparative Approach to the Amharic Lexicon*, “Afroasiatic Linguistics” 5/2 (1977).
- Appleyard, D.; *The Internal Classification of the Agaw Languages. A Comparative and Historical Phonology*, Bynon J. (ed.): *Current Progress in Afro-Asiatic Linguistics*, Amsterdam, Philadelphia 1984., John Benjamins, pp. 33–67.

- Appleyard D., *Agaw and Omotic Links: The Evidence of the Lexicon*. MS, Paper presented at the 2nd International Symposium on Cushitic and Omotic Languages, Turin, November 1989. Proceedings forthcoming.
- Appleyard D., *The Vowel Systems of Agaw: Reconstruction and Historical Inferences*, in: *Proceedings of the Fifth International Hamito-Semitic Congress. Band II*, Wien 1991., Afro-Pub. pp. 13–28.
- Basset M. R., *Notes de lexicographie berbère*, “Journal Asiatique” Ser. VIII, vol. 10 (1887), pp. 365–464.
- Behn Fr., *Lexikalische Beiträge zur ägyptisch-semitischen Sprachvergleichung*. “Zeitschrift für Ägyptische Sprache” 62 (1927), pp. 80–83.
- Behn Fr., *Über die Beziehungen des Ägyptischen zu den hamitischen Sprachen*, “Zeitschrift der Deutschen Morgenländischen Gesellschaft” 82 (1928), pp. 136–141.
- Belova, A. G., *Struktura kornja v drevneegipetskem i semitskikh jazykah*, *Problemy języków Azji i Afryki*, Warszawa 1987, Wydawnictwo Polskiej Akademii Nauk, pp. 275–282.
- Belova, A. G., *Refleksy semitskikh sibiljantov v drevneegipetskem*, “Meroé” 4 (1989), pp. 9–21.
- Belova, A. G., *Sur la reconstruction du vocalisme afroasiatique: quelques correspondances égypto-sémitiques*, in: *Proceedings of the Fifth International Hamito-Semitic Congress. Band II*, Wien 1991, Afro-Pub., pp. 85–93.
- Belova, A. G., *K voprosu o rekonstrukcii semitskogo kornevogo vokalizma*, “Voprosy Jazykoznanija” 6 (1993), pp. 28–56.
- Belova, A. G., *Istoričeskaja morfologija arabskogo jazyka. Po materialam pamjatnikov doislamskogo perioda*, Moskva 1994, Izdatel'skaja Firma “Vostočnaja Literatura”.
- Bender, M. L., *Omotic. A New Afroasiatic Language Family*, Carbondale, Illinois 1975, Southern Illinois University.
- Bender, M. L. and Fleming, H. C., *Non-Semitic Languages*, in: *Languages in Ethiopia*, London, 1976, Oxford University Press, pp. 34–58.
- Blažek, V., *Omotic Lexicon in Afroasiatic Perspective: Body Parts Cognates*. MS. Paper presented at the II. International Symposium on Cushitic and Omotic Languages, Turin 1989, 41 pp.
- Blažek, V., *Elam: A Bridge between Ancient Near East and Dravidian India?* MS. Paper presented at the 3rd World Archaeological Congress, New Delhi, Dec. 1994a. 26 p.
- Bobrova, L. and Militarev, A, *From Mesopotamia to Greece: to the Origin of Semitic and Greek Star Names*, in: Hannes, D. G. (ed.), *Die Rolle der Astronomie in den Kulturen Mesopotamien*, Graz 1993, RM — Druck- und Verlagsgesellschaft m.b.H, pp. 307–329.
- Brockelmann, C., *Ägyptisch-semitische Etymologien*, “Zeitschrift für Semitistik” 8 (1932), pp. 97–117.
- Büchner, H., *Vokabulare des Sprachen in und um Gava (Nordnigerien)*, “Afrika und Übersee” 48 (1964), pp. 36–45.
- Calice, Fr., *Zur ägyptisch-semitischen Wurzelverwandtschaft*, “Zeitschrift für Ägyptische Sprache” 39 (1901), pp. 146–147.
- Calice, Fr., *Grundlagen der ägyptisch-semitischen Wortvergleichung*, Wien 1936, Selbstverlag der Orientalischen Institutes der Universitäts Wien.
- CED = J. Černý: *Coptic Etymological Dictionary*, Cambridge 1976, Cambridge University Press.
- Cerulli, E., *Studi etiopici. II. La lingua e la storia dei Seidamo*, Roma 1938, Istituto per l'Oriente.
- Cohen, M., *Essai comparatif sur le vocabulaire et la phonétique du chamito-sémitique*, Paris 1947, Librairie Ancienne Honore Champion.
- Conti Rossini, C., *Studi su popolazioni dell'Etiopia*, “Rivista degli Studi Orientali” 6 (1913), pp. 365–426.

- Diakonoff, I. M., *Problems of Root Structure in Proto-Semitic*, "Archív Orientální" 38 (1970), pp. 453–480.
- Diakonoff, I. M. with assistance by Militarev, A. Ju. and Stolbova, O. V., *Proto-Afrasian and Old Akkadian*, MS. Leningrad, ab. 1986. (Recently published in the "Journal of Afroasiatic Languages" unavailable to the author.)
- Diakonoff, I. M., *Afrasian Languages*, Moscow 1988, Nauka.
- Dolgopol'skij, A. B., *Materialy po sravnitel'no-istoričeskoy fonetike kušitskikh jazykov. Gubnye i dental'nye smyčnye v načal'nom položenii*, in: Jazyki Afriki. Voprosy struktury, istorii i tipologii, Moskva 1966, Nauka, pp. 35–88.
- Dolgopolsky, A. B., *La permutation des *m et *b initiaux dans les racines couchitiques*, in: *Il Congrès International des Africanistes. Communications de la délégation de l'URSS*, Moscou 1967, Nauka, pp. 3–17.
- Dolgopolsky, A. B., *A Long-Range Comparison of Some Languages of Northern Eurasia. Problems of Phonetic Correspondences*, in: *VII Meždunarodnyj Kongress Antropologičeskikh i Etnografičeskikh Nauk. Tom V*, Moskva 1970, Nauka, pp. 620–628.
- Dolgopol'skij, A. B., *Sravnitel'no-istoričeskaja fonetika kušitskikh jazykov*, Moskva 1973, Nauka.
- Dolgopolsky, A. B., *Chadic-Semitic-Cushitic: Epenthetic -γ- in Sura in the Light of Hamito-Semitic Comparative Linguistics*, in: H. Jungraithmayr (ed.): *The Chad Languages in the Hamito-Semitic-Nigritic Border Area. Papers of the Marburg Symposium, 1979*, Berlin 1982, Verlag von Dietrich Reimer, pp. 32–46.
- Dolgopolsky, A. B., *Semitic and East Cushitic. Sound Correspondences and Cognate Sets*, in: *Ethiopian Studies Dedicated to Wolf Leslau*, Wiesbaden 1983, Otto Harrassowitz, pp. 123–142.
- Dolgopolsky, A. B., *Hamito-Semitic Etymologies*. MS. Paper presented at the 6th International Hamito-Semitic Congress, Moscow, April 1994. 1 p.
- Ehret, Chr., *The Historical Reconstruction of Southern Cushitic Phonology and Vocabulary*, Berlin 1980, Dietrich Reimer Verlag.
- Ehret, Chr., *Revising Proto-Kuliak*, "Afrika und Übersee" 64 (1981), pp. 81–100.
- Ehret, Chr., *Proto-Cushitic Reconstruction*, "Sprache und Geschichte in Afrika" 8 (1987).
- Ember A., *Semito-Egyptian Sound Changes*, "Zeitschrift für Ägyptische Sprache" 49 (1911), pp. 87–92.
- Ember, A., *Kindred Semito-Egyptian Words*, "Zeitschrift für Ägyptische Sprache" 49 (1911), pp. 93–94.
- Ember, A., *Notes on the Relation of Egyptian and Semitic*, "Zeitschrift für Ägyptische Sprache" 50 (1912), pp. 86–90.
- Ember, A., *Egypto-Semitic Studies*, Leipzig 1930, The Alexander Cohut Memorial Foundation.
- FD = Faulkner, R. O., *A Concise Dictionary of Middle Egyptian*, Oxford, 1962, Clarendon Press.
- Fleming, H., *Omotica, Afrasiana and More: Ethiopia as the Ever-Flowing Vase*, "Mother Tongue" 12 (1990), pp. 22–30.
- Frajzyngier, Z., *A Dictionary of Mupun*, Berlin 1911, Dietrich Reimer Verlag.
- Greenberg, J. H., *Studies in African Linguistic Classification*, Branford, Connecticut 1995, Compass Publishing Company.
- Greenberg, J. H., *The Languages of Africa*, "International Journal of American Linguistics" 29 (1963).
- Haberland, E., *Zur Sprache der Bodi, Mursi und Yidenič in Südwest-Äthiopien*, Lukas J. (ed.), *Neue afrikanistische Studien*, Hamburg 1966, Deutsches Institut für Afrika-Forschung, pp. 87–99.

- HCVA 1 = Diakonoff, I. M., Belova, A. G., Militarev, A. Ju., Porhomovskij, V. Ja., *Historical Comparative Vocabulary of Afrasian*, Part 1, "St. Petersburg Journal of African Studies" 2 (1993), pp. 5–28.
- Heine, B., *Vocabulaire ostafrikanischer Restsprachen. Teil I.*, "Afrika und Übersee" 56 (1973), pp. 276–283.
- Heine, B., *Notes on the Rendille Language*, "Afrika und Übersee" 59 (1976), pp. 176–223.
- Heine, B., *Bemerkungen zur Boni-Sprache (Kenia)*, "Afrika und Übersee" 60 (1977), pp. 242–295.
- Heine, B., *The Sam Languages. A History of Rendille, Boni and Somali*, "Afroasiatic Linguistics" 6/2 (1978), pp. 23–115.
- Hodge, C. T., *An Egypto-Semitic Comparison*, "Folia Orientalia" 17 (1976), pp. 6–28.
- Hodhe, C. T., *Lislakh Labials*, "Anthropological Linguistics" 23/8 (1981), pp. 368–382.
- Hodge, C. T., *Etymological Reassessment*, Mukarovský, H. G. (ed.): *Proceedings of the Fifth International Hamito-Semitic Congress. Band II*, Wien 1991, Afro-Pub., pp. 95–105.
- Hodge, C. T., *Tooth and Claw*, "Anthropological Linguistics" 34 (1992), pp. 202–232.
- HSED = Orel, V. É.-Stolbova, O. V., *Hamito-Semitic Etymological Dictionary*, Leiden, 1995, E. J. Brill.
- Hudson, Gr., *Highland East Cushitic Dictionary*, Hamburg 1989, Buske.
- Illič-Svityč, V. M., *Materialy k srovnitel'nomu slovarju nostratičeskikh jazykov*, "Etimologija" (1965), pp. 321–373.
- Illič-Svityč, V. M., *Iz istorii čadskogo konsonantizma. Labial'nye smyčnye, Jazyki Afriki*, Moskva, 1966, Nauka, pp. 9–34.
- Illič-Svityč, V. M., *Sootvetstviya smyčnyh v nostratičeskikh jazykah*, "Etimologija" (1966), pp. 304–355.
- Jungraithmayr, H., *Die Sprache des Sura (Maghavul) in Nordnigerian*, "Afrika und Übersee" 47 (1963), pp. 8–89, 204–220.
- Jungraithmayr, H., *Materialen zur Kenntnis des Chip, Montol, Gerka und Burrum (Südplateau, Nordnigerien)*, "Afrika und Übersee" 48 (1965), pp. 161–183.
- Jungraithmayr, H., *Kontakte zwischen Adamawa-Ubangi- und Tschad-Sprachen: zur Übertragung grammatischer Systeme*, "Zeitschrift der Deutschen Morgenländischen Gesellschaft" 130/1 (1980), pp. 70–85.
- Jungraithmayr, H. and Ibriszimow, D., *Chadic Lexical Roots. Vol. II. Documentation*, Berlin, 1994, Dietrich Reimer Verlag.
- KHW = Westendorff, W., *Koptisches Handwörterbuch*, Heidelberg 1977, Carl Winter Verlag.
- Knudsen, E. E., *Der Wechsel h:d im Ägyptischen*, "Zeitschrift für Ägyptische Sprache" 88 (1962), pp. 33–36.
- Kraft, Ch., *Chadic Wordlists I–III*. Berlin 1981, Dietrich Reimer Verlag.
- Lamberti, M., *Some Konsoid Etymologies*, "Anthropos" 82/4–6 (1987), pp. 529–541.
- Leslau, W., *The Parts of Body in Modern South Arabic Languages*, "Language" 21 (1945), pp. 230–249.
- Leslau, W., *Southeast Semitic Cognates to the Akkadian Vocabulary. III*, "Journal of the American Oriental Society" 89 (1969), pp. 18–22.
- Leslau, W., *Observations on Sasse's Vocabulary of Burji*, "Afrika und Übersee" 71 (1988), pp. 177–203.
- Loprieno, A., *Zu einigen Phänomenen ägyptischer Phonologie*, in: Behlmer H. (ed.), *Quaerentes scientiam. Festgabe für Wolfhart Westendorf*, Göttingen 1994, Hubert & Co. pp. 119–131.
- Lukas, J., *Deutsche Quellen zur Sprache der Musgu in Kamerun*, "Zeitschrift für Eingeborenen-Sprachen", Beiheft 24 (1941).

- Lukas, J., *Das Hitkalanci, eine Sprache um Gava (Nordostnigerien)*, "Afrika und Übersee" 48 (1964), pp. 81–114.
- Lukas, J., *Das Nomen im Bade (Nordnigerien)*, "Afrika und Übersee" 51 (1968), pp. 91–116 and 198–224.
- Majzel', S. S. (additions by Militarev A. Ju.), *Puti razvitiya kornevogo fonda semitskikh jazykov*. Moskva 1983, Nauka.
- Militarev, A. Ju., *Sovremennoe srovnitel'no-istoričeskoe afrazijskoe jazykoznanie: čto ono možet dat' istoričeskoj nauke?*, "Lingvističeskaja rekonstrukcija i drevnejšaja istorija Vostoka", Čast 3. Moskva 1984, Nauka, pp. 3–26.
- Militarev, A. Ju.; Orel, V. É.; Stolbova, O. V., *Hamito-Semitic Word-Stock: 1. Dwelling*, in: *Lingvističeskaja rekonstrukcija i drevnejšaja istorija Vostoka. Materialy k diskussijam na konferencii (Moskva, 29 maja–2 iyunja 1989 g.)*. Čast' 1, Moskva, 1989, Nauka, pp. 137–158.
- Militarev, A. Ju., *Neskol'ko peredneaziatskikh étimologij*, in: *Irano-afrazijskie jazykovye kontakty. Vypusk 2*, Moskva 1991, Nauka, pp. 72–77.
- Militarev, A. Ju., *Istoričeskaja fonetika i leksika livijsko-guančskih jazykov*, in: *Jazyki Azii i Afriki. IV, kniga 2*, Moskva 1991, Glavnaja Redakcija Vostočnoj Literatury, pp. 238–267.
- Moreno, M. M., *Appunti sulla lingua darasa*, in: *Rendiconti della R. Accademia Nazionale dei Lincei. Classe di scienze morali, storiche e filologiche*, Ser. VI, vol. 13 (1937), pp. 211–240.
- Mukarovsky, H. G., *Mande-Chadic Common Stock*, Wien 1987, Afro-Pub.
- Mukarovsky, H. G., *On the Relations of Cushitic, Omotic and Chadic Languages*. MS. Handout for the II. International Symposium on Cushitic and Omotic Languages, Turin 1989, 6 p.
- Mukarovsky, H. G., *Chadic, Mande and Nigritic*, Ibriszimow, D.; Leger, R. (eds.): *Studia Chadica et Hamito-Semitic*, Frankfurt am Main 1995, Rüdiger Köppe Verlag. pp. 65–75.
- Müller, W. W., *Beiträge zur hamito-semitischen Wortvergleichung*, in: *Hamito-Semitic*. The Hague 1975, Mouton, pp. 63–74.
- Newman, P. and Ma R., *Comparative Chadic: Phonology and Lexicon*, "Journal of African Languages" 5/3 (1966), pp. 218–251.
- Newman, P., *Historical Sound Laws in Hausa and Dera (Kanakuru)*, "Journal of West African Languages" 7/1 (1970), pp. 39–51.
- Newman, P., *Chadic Classification and Reconstructions*, "Afroasiatic Linguistics" 5/1 (1977), pp. 1–42.
- Orel, V. É. i Stolbova, O. V., *K rekonstrukcii praafrazijskogo vokalizma. 1–2.*, "Voprosy Jazykoznanija" 5 (1988), pp. 66–83.
- Orel, V. É. i Stolbova, O. V., *Čadsko-egipetskie izoglossy v oblasti kul'turnoj leksiki*, in: *Lingvističeskaja rekonstrukcija i drevnejšaja istorija Vostoka. Čast' 1*. Moskva 1989, Nauka, pp. 131–136.
- Orel, V. É. i Stolbova, O. V., *Iz kušitskoj leksiki material'noj kul'tury*, in: *Lingvističeskaja rekonstrukcija i drevnejšaja istorija Vostoka. Čast' 3*, Moskva 1989, Nauka, pp. 88–89.
- Orel V. É.; Stolbova, O. V., *Cushitic, Chadic, and Egyptian: Lexical Relations*, Shevoroshkin, V. (ed.), *Nostratic, Dene-Caucasian, Austric and Amerind*. Bochum 1992, Brockmeyer, pp. 167–180.
- Orel, V. É.; Stolbova, O. V., *On Chadic-Egyptian Lexical Relations*, in: Shevoroshkin, V. (ed.), *Nostratic Dene-Caucasian, Austric and Amerind*, Bochum 1992a, Brockmeyer, pp. 181–203.
- Orel, V. É., *From Hamito-Semitic to Egyptian: Historical Phonology*. MS. Tel-Aviv 1994, 11 p.
- Porhomovskij, V. Ja., *Istoričeskij konsonantizm jazykov kotoko*, Moskva 1972, Institut Jazykoznanija Akademii Nauk SSSR.
- Reinisch, L., *Wörterbuch der Bedauye-Sprache*, Wien 1895, Hölder.

- Reinisch, L., *Das Zahlwort vier und neun in den chamitisch-semitischen Sprachen. Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften. Phil.-hist. Classe* 121/12 (1890).
- Roper, E.-M., *Tu Bedawie*, Hertford 1928, Stephen Austin & Sons.
- Rössler, O., *Das ältere ägyptische Umschreibungssystem für Fremdnamen und seine sprachwissenschaftliche Lernen*, in: J. Lukas (ed.): *Neue afrikanistische Studien*. Hamburg 1966, Deutsches Institut für AfrikaForschung, pp. 218–229.
- Rössler, O., *Berberisch-tschadisches Kernvokabular*, “Africana Marburgensia” 12/1–2 (1979), 20–31.
- Rössler, O., *Ägyptisch und Hamatisch*, in: Segert, St., Bodrogliglieti, A. J. E. (eds.), *Ethiopian Studies Dedicated to Wolf Leslau*, Wiesbaden 1983, Otto Harrassowitz, pp. 330–336.
- Sasse, H.-J., *The Consonant Phonemes of Proto-East-Cushitic (PEC)*, “Afroasiatic Linguistics” 7/1 (1979).
- Sasse, H.-J., *An Etymological Dictionary of Burji*, Hamburg 1982, Buske.
- Shimizu, K., *Mumuye protowestnigritische Lautentsprechungen und ihre Bedeutung für die Rekonstruktion des protonigritischen Ur-Lautsystems*, “Afrika und Übersee” 64 (1981), pp. 3–23.
- SISAJa I–III = D’jakonov, I. M.; Belova, A. G.; Militarev, A. Ju.; Porhomovskij, V. Ja.; Stolbova, O. V., *Sravnitel’no-istoričeskij slovar’ afrazijskikh jazykov*. Vypusk 1, 2, 3, “Pis’mennye pamjatniki i problemy istorii kul’tury narodov Vostoka.” XV, XVI, XIX godičnaja naučnaja sessija LO IV AN SSSR. Moskva 1981, 1982, 1985, Nauka.
- Skinner, N., *North Bauchi Chadic Languages: Common Roots*, “Afroasiatic Linguistics” 4/1 (1977), pp. 1–49.
- Starostin, S. A., Dybo, V. A., Dybo, A. V., Helimsky, E. A., Militarev A., Ju., Mudrak, O. A., Starostin, G. S., *Basic Nostratic-Afrasian-Sino-Caucasian Lexical Correspondences*. MS. Moscow 1995.
- Stolbova, O. V., *Materialy k sravnitel’noj fonetike afrazijskikh jazykov*, in: *Konferencija “Nostratičeskie Jazyki i Nostratičeskoe jazykoznanie”*. Tezisy dokladov, Moskva 1977, Institut Slavjanovedenija i Balkanistiki, pp. 64–65.
- Stolbova, O. V., *Opyt rekonstrukcii verhnezapadnočadskih kornej*, in: *Jazyki zarubežnogo Vostoka. Sbornik statej*, Moskva 1977, Nauka, pp. 152–160.
- Stolbova, O. V., *Sravnitel’no-istoričeskaja fonetika i slovar’ zapadnočadskich jazykov*, in: *Afrikanskoe istoričeskoe jazykoznanie. Problemy rekonstrukcii*, Moskva 1987, Nauka, pp. 30–268.
- Stolbova, O. V., *Chadic Laterals and Their Correspondences in Semitic and Egyptian*. MS. Moscow 1991, 9 p.
- Stolbova, O. V., *Chadic Reflexes of Egyptian zš, sš, šz*. MS. Handout of the paper presented at the 6th International Hamito-Semitic Congress, Moscow, April 1994, 2 p.
- Stolbova, O. V., *Lateral Sibilants in Chadic (Reconstruction) and Their Correspondences in Semitic and Egyptian*, in: Ibriszimow, D. and Leger R. (eds.), *Studia Chadica et Hamito-Semiticæ*, Frankfurt am Main 1995, Rudiger Köppe Verlag, pp. 58–64.
- Takács, G., *Egyptian Lexics in an Afrasian Perspective: New Etymologies*, in: “*Studia Etymologica Cracoviensia*” (1996), pp. 125–171.
- Takács, G., *Aegyptio-Afroasiatica IV*, “Discussions in Egyptology” 35 (1996a), 123–128.
- Vergote, J., *Phonétique historique de l’égyptien*, Paris 1945, Le Muséon.
- Vycichl, W., *Über den Wechsel der Laute h und ž im Ägyptischen*, “Zeitschrift für Ägyptische Sprache” 82 (1957), pp. 71–73.
- Vycichl, W., *Les études chamito-sémitiques à l’Université de Fribourg et le “Lamekhétique”*, Actes du Premier Congrès International de Linguistique Sémitique et Chamito-Sémitique, Paris 1974, Mouton, pp. 60–67.

- Vycichl, W., *Egyptian and Other Semito-Hamitic Languages*, Bynon, J., Bynon Th. (eds.), *Hamito-Semitica*, The Hague 1975, The Mouton, pp. 201–212.
- Vycichl, W., *L'état actuel des études chamito-sémitiques*, in: *Atti del Secondo Congresso Internazionale di Linguistica Camito-Semitica*, Firenze 1978, Istituto di Linguistica e di Lingue Orientali, Universita di Firenze, pp. 63–76.
- Ward, W. A., *Some Egypto-Semitic Roots*, “Orientalia” 31 (1962), pp. 397–412.
- Wb = A. Erman und H. Grapow, *Wörterbuch der ägyptischen Sprache. I–V.*, Berlin 1957–1971, Akademie-Verlag.
- Wölfel, D., *Eurafrikanische Wortschichten als Kulturschichten*, “Acta Salamanticensia. Filosofia y letras” 9/1 (1955).
- WUS = Aistleitner, J., *Wörterbuch der ugaritischen Sprache*, Berichte über die Verhandlungen der Sächsischen Akademie der Wissenschaften zu Leipzig. Phil.-hist. Kl. 106/3 (1963).
- Zaborski, A., *Biconsonantal Verbal Roots in Semitic*, in: “Zeszyty Naukowe Uniwersytetu Jagiellońskiego. Prace Językoznawcze” 5 (1971), pp. 51–98.
- Zaborski, A., *Der Wortschatz der Bedscha-Sprache — eine vergleichende Analyse*, in: E. von Schuler (ed.), *XXIII. Deutscher Orientalistentag, vom 16. bis 20. September 1985 in Würzburg. Ausgewählte Vorträge*, Stuttgart 1989, Franz Steiner Verlag. pp. 573–591.
- Zyhlarz, E., *Ursprung und Sprachcharakter des Altägyptischer*, “Zeitschrift für Eingeborenen-Sprachen” 23 (1932–1933), pp. 25–45, 81–110, 161–194, 241–254.