

ELEPHANT, HIPPOPOTAMUS AND OTHERS: SOME
ECOLOGICAL ASPECTS OF THE AFROASIATIC HOMELAND*

Václav BLAŽEK
Ryneček 148, 261 01 Příbram, Czechia

The author pursues these aims: (1) collecting basic terminology, (2) differentiating zoonyms with analysable semantic motivation, borrowings and etymologically obscure terms, (3) interpreting the results. According to his conclusions, the elephant and hippopotamus, unlike rhinoceros, probably lived in the Afroasiatic homeland. However, only new and independent arguments could confirm or disprove this hypothesis.

There are several words meaning “elephant” in Afroasiatic zoological terminology.

The semantical motivation of some of them can be explained on the basis of general meanings such as horn, tooth, big, etc., with help of other zoonyms or as borrowings from neighbouring languages.

1) Semitic languages probably only know word for an elephant which can be reconstructed **pīr-* or **pīl-* (**pīr-l-?*) > Akk *pīlu*, *pīru*, *pēru* “elephant”, *pīrāti* “female elephant”, *šinnipīri* “ivory” (> Hurrit *šinni perahū*), Hbr *pīl*, Aram-Syr *pīlā*, Mandaic *pīla(a)*, Arab *fil* “elephant”, ? Gz *falfal* “id., water buffalo” (Salonen 1976, 232–3; Leslau 1987, 159).

The Sem “elephant” was borrowed by more languages, e.g. OPers *piru-* “ivory”, OInd *pīlú-* “elephant” (Mayrhofer I, 296), Greek (Hesychios) *pirissas* **eléphas* (Schrader, Nehring I, 245). Probably the closest cognates among AA zoonyms are in ECush: Yaaku *puria*, pl. *puriai* “rhinoceros” and in CChad: Margi (Meck) *pīr* “elephant” (Illich-Svitych 1966, 26: Sem+Margi). If we accept the semantical motivation “horn” → “elephant (rhinoceros)” confirmed by typological evidence, e.g. Sumerian *am-si* “elephant”, composed from *am* “wisent” and *si* “horn” (Salonen 1976, 175), we can seek the original root in AA **par/l-* “horn”: WChad **p/para* > Kofyar *fēr*; NBauči: Warji *parái*, Kariya *pár*, Miya *ápár*, *ipír*, Pa’ *apur-kiti*; CChad: Daba *fālám*, *fālím* id. (Stolbova 1987, 146; Mukarovskiy 1987, 214); NOM: Šakko *fāra*, Še *fāl*, Benčo *pāl*, *fāl* (Mukarovskiy 1989). On the other hand, also known SNil **pēL* “elephant” (Rottland 1982, 403), which can be a later borrowing from

Arabic (see Schuchardt 1912, 29), but external parallels from Niger-Congo confirming an older age of the SNil word are not excluded: Adamawa: Mata *pāle*, Koke *boāl* (Lukas), Mburu *balli*, Duru *mbal*, Mangbai *bālā*, Dama *bali*, Sari *bari*, etc. “elephant” (Strümpell), also Jarawan-Bantu: Nagumi *bali* id. (Strümpell), and/or pUbangian **fārò* id. (Moñino 1988, 108).

But the presence of a similar root for “elephant” also in CChad: Zulgo *mbele*, Mada *mbile* (Mouchet), Hurzo, Mbreme, Gwendele *mbelele*, Uldeme, Muyang *mbele*, allows for the formulation of the opposite hypothesis: The root *(*m*)*bal-* for “elephant” in Adamawa and Jarawan Bantu represent the Chadic loans. This point of view is confirmed by WChad **[ha-]bilum* (> *ḥVIVm*) “horn” > Montol *bulu*, Gerka *bil*; Karekare *ḥēlim*, Bole *ḥōlúm*, Ngamo *ḥalum*, etc. with parallels in SOM: Galila *bāli*, Dime *baltu* “horn” (Mukarovskiy 1987, 214; Stolbova 1987, 158: **mba-Hili-um*). Mukulu (EChad) *bilyò* “buffalo” is perhaps of the same origin (“horned”?). Daba (CChad) *bilèr* “hippopotamus” can belong here, too, if the original meaning was “elephant”, cf. as a typological parallel the words for “hippo” in some Mande languages: Dan *ya-bia*, Bě *yo-biḡ*, lit. “water” + “elephant” (Mukarovskiy 1987, 208). If the preceding implications are correct, the form **m-bVl-* represents a regular derivation by the prefix of nomina actionis/agentis (Dolgopolsky 1967).

2) One of the most widespread terms for “elephant” in CChad and EChad is the form **bakin-* > Mafa *bikine*, Gisiga *bigine*, Mofu-Gudur *bēgīney*, Mefebe *bekine*, Magumaz *bikine*; Musugeu *bignt*, Maturua *bēgīnē*; Gidar *bēkne*; Lame *biá'nè*, (Sachnine) *bàknày*, Peve *bwoknai*, Misme *bakni*, Dari *bagnei*; Musgu (Barth) *fēgenē*, (Krause) *pékene*, Mbara *pikinē*, Vulum *pēknē*; Kera *bānà*, Kwang *bāgini*. The connection with the word for “horn” is possible, cf. CChad: Hurzo *bōḥwe*, Zeligwa *mbukum*, Udlam *ambukam*. This interpretation is confirmed by other terms for horned animals, derived probably from the same root: WChad: Hausa *ḥaunā*, pl. *ḥak^wānē* “buffalo” (Rössler 1964, 203). The external parallels from Mande (Mano *biè*, Samo *bḡ*, *biyàgá*, Dan *biḡ*; etc. “elephant”), quoted by Mukarovskiy (1987, 157), are rather of areal origin (Chadic > Mande) if not accidental. Similarly ENil: pMasai *buḥa* “bull” (Ehret, quoted by Rottland 1982, 97).

3) The semantical derivation “tooth” → “elephant” can be supposed in AA area probably only in the case of Beja *kurib* “elephant” (> Barea *kūrbe*), with an article *ū-krub*, vs. *kūre*, *kūle*, (Roper) *kwire* “tooth” (cf. *ō-kūrbī-t kūre* “ivory”). This pattern is known in more African language families, e.g. pWN:igr **ni-*, **niang-* “elephant” vs. Common Bantu **niangá-*, “tusk” (Mukarovskiy 1976, 228), maybe WNil: Šilluk *lyeč* “elephant” vs. *lēḡo*, Lango, Ačoli, Alur, Luo *lak* “tooth” (Drexel 1925, 239; Blount, Curley 1970, 12).

4) The semantical motivation “nose” → “elephant’s trunk” → “elephant” can be seen in Gz *nage*, *noge* “elephant”, *nagot* “trunk of an elephant”, *qarna nage* “ivory” = “horn of an elephant”, Te, Tna *nigot* > Bilin *nug^{wat}*, Afar-Saho *nuge* “trunk of elephant” (Leslau 1987, 390, 393), while Yaaku *nuka* “nose” (Ehret 1987, 24: Cush **nug^w* “snout”) represents rather an independent cognate, how SOM parallels confirm: Ari, Banna, Karo *nuki*, Dime *nūko* “nose” (Dolgopolskiy 1973, 177).

5) The original Berber *(*a*)*aliw*, pl. *ilwān* “elephant” is attested in Southern

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and Western branches: (S) Ghat *alu*, Ahaggar *ēlu*, pl. *ēlwān*, Air *ilīw*, pl. *ilwan*, Iullemidden *elīw*, pl. *elwan*, (W) Zenaga (Nicolas) *ižih*, (Basset) *ižit*, pl. *āžāqēn*. The external connections are problematic, maybe Sem: Akk *alū* (*Halw-*) “mythical giant bull”, originally perhaps “wisent” (Bison bonasus) (Salonen 1976, 167; Diakonoff 1981, 32) and ECush: pBoni *‘ālīšī* “female elephant” (Heine 1982, 104). If the Berber *-w-* originates from the older *-b-*, the closest parallels are found in Chad (E) Mukulu *‘elbi* “elephant” and perhaps (W) Tangale (Jungraithmayr) *lābātā* id. Probably the same root is presented in (E) Somrai *lābei* “cattle” (Jungraithmayr, Shimizu 1981, 79, 95). It is not excluded, Greek *éléphas*, *-antos*, attested from Mycaean, was borrowed from any AA source, maybe Libyan? What is the connection of the preceding zoonyms with Sumerian *alim* “wisent” (Salonen 1976, 165)? Can we seek the traces of AA substratum here?

6) The Egyptian name for “elephant” *ẓb.w* is known from the Ancient Kingdom until the New Kingdom (EG I, 7), cf. also *ẓb* “ivory” > Latin *ebur* id. (Ivanov 1984, 71) and Old *ībha-* “elephant” (Mayrhofer I, 90; III, 644). If the initial sound in pEg was *‘l-*, the closest cognates appear in Chadic: (W) Tangale *lābātā*, (E) Mukulu *‘elbi* id. (see n. 5) and maybe Berber *‘aliw* < *[a-]lib[w]* - ? But the existence of the word *īrbẓ* “rhinoceros” attested in the Ancient Kingdom (EG I, 115) and the fact that *ẓb.w* means (from Middle Kingdom “rhinoceros” also (Störk 1975, c. 1214–50), allows us to suppose the original form *‘arb-*, which has exact cognates in ECush: *‘arb-*, “elephant” (Sasse 1982, 28) Som *arba*, *arbe*, Rendille *arab*, Arbore *arba*, Dasencč *‘arab*, Elmolo *‘arap*, Oromo *arba*, Konso *arpa*, Gidole *arp*, Burji *ārba*, Dullay *arapka* id., Yaaku *arape* “large feline” (Ehret), “carnivorous animal” (Heine), SCush *‘ara* > Mbugu *‘áro* “large herbivore elephant” (Ehret 1980, 332), ? SCush > ENil: Masai *ol-arro* “buffalo” (Ehret 1974, 78); CChad: pKotoko *‘arbu/i* > Buduma *ambu*, ?Logone *nevi* (or *‘IVb-*?, see n. 5), Ngala *ánwe*, Makeri *‘árfu*, Gulfei *‘árfu(r)*, Kuseri *‘árwi*, Šoe *arfu* “elephant” (Sölken 1967, 242–3). The etymology is not unambiguous. The two following solutions seem to be the most promising: a) the *-b* derivation from the AA root represented by Sem *‘arw-* “wild animal” (Fronzaroli 1968, 292) and ECush *‘awr-* “large male animal”, cf. e.g. Boni *‘ór* “male elephant”, Saho *awr* “bull” (Sasse 1979, 45, 46); b) the *‘a-* derivation from the AA root *‘rVb-* “great, strong” > Sem *‘rab(b)-* “(to be) great” (Aistleitner 1963, 287; Segert 1984, 200) // ECush *‘rib(-)* “to be strong” (Sasse 1982, 159). More on AA *‘a-* see Zaborski 1974.

7) One of the less frequent Chadic names for “elephant”, (W) Hausa *torō* “giant male elephant” (Meinhof 1912, 233 compared with Ful *torōri*), (C) Musgu (Röder) *tauraga*, Muskum *tāwrākā*, Baldamu *turogo* “elephant”, maybe Daba *mōtūlūm* id., has a possible cognate in NOm: Kafa *turo* “fattened ox”. But external (areal?) parallels exist too, besides Ful and Mande: Soninke *tūre* “elephant”, Bozo *twōi* id. (Mukarovskij 1987, 157) in NS: Kuliak: Tepeth *turo* “buffalo”, Surma: Didinga *dhuri* “male buffalo”; ?ENil: Bari *tūre* “horn as musical instrument” (Ehret 1974, 94); Nubian: Meidob *tur* “cow”, Dulman *térē* “ox”, Dilling *téra*, Dair *terrē* “bull”; ESaharan: Zaghawa *turr* “ram”. And so a borrowing is the most hopeful explanation of this zoonym.

8) Similarly, the most widespread Chadic word for “elephant”, reconstructed

as *‘gīwan* (Newman 1977, 25) on the basis (W) Hausa *gīwā*, Gwandara *gyuwo*, Montol *kūn*; SBauči: *Seya gīwi*; Bade *giyānw-an*, Duwai *gīwīn*; (C) Vizik *giwan*; Wandala *gūwè*, Glavda *gunà*, Zeghwana *gwinè*, Gava *gwinà*, Nakatsa *gwona*, Paduko *gwhana*, Lamang *gwiyan*, Hidkala *gīwàn*, Hide *giyīn*; Mora *giwe*; (E) Mubi *gāwyàn*, has only an isolated and problematic parallel in AA: NOm: Gimira (Še) *gām* (Montadon). On the other hand, the external parallels allow us to suppose the substrate origin with high probability, cf. NS: Maba *ngon*, Aiki *àṅṅon*, Kaben *aṅṅon* (Nougayrol); WSaharan: ? Kanuri *komagen*; Tubu *komōgun*, *kūun*, *kūwun* (Lukas), resp. Daza *kuwun*, Teda *kuhun* (de Coeur); WNil: Dinka *akōn* id. (Greenberg 1963, 138) probably representing a root which is different from another NS isogloss “elephant” known from Tama *ḡor*; Sungor *ḡor*; Fur *aṅir*; Nubian: Dilling *oḡgol*, Gulfan *ānworañ/ānwolañ/obul*, Koldegi *omul* (Meinhof); Gaam *are*; Surma: Didinga *oḡgol*, Tirma *‘noro*, Yidinit *nu ‘ar* (Haberland 1966, 93; Fleming 1983, 440), pKuliak *‘oḡor* (Ehret 1981, 98), pKoman *‘gual* (Bender 1983, 280), WNil: Nuer *gwor*, etc. id. (Ehret 1983, 410), maybe ESaharan: Zaghawa (Mac Michael) *girrbo*, Berti (Petráček) *zirrbe*. The Kordofan data as Tegele *ñine*, Lafofa *uñi*, Tagoy *fūnen*, pl. *yuñen*, Tumtum *moṅgo*, etc. (Meinhof) can be connected with both NS roots but also with Niger-Congo “elephant” (Greenberg 1963, 155), borrowed in WChad: Angas-Ankwe *‘nyi* id. (Hoffmann 1970, 9).

9) The most widespread term for “elephant” common for most of Cushitic and Omotic languages is attested in CCush: *‘zaxn-* (Ehret 1987, 66) > Bilin *žānā*, Xamir *zohón*, Qwara, Dembea, Kemant *žānā*, Falaša (Beke) *djāni*, Awngi *ennī*, *ennāñ*, (Fleming) *ziyoni*, Kunfāl *eni*, borrowed probably in Ethio-Semitic: Amhara *zāhon*, *zohon*, Gafatzohūniš, Čaha *zāx‘ārā*, Ennāmor *žāx‘ārā*, Gogotzegā, Tigriña *zihol*, while the following forms resemble rather the ECush (Afar-Saho/Somali): Harari *doxon*, Selti *dāhano*, Ulbareg *dehanō* (Leslau 1979, 721); ECush: Afar-Saho *dakāno*, Somali *dagon*, *dqon*, Sidamo *dano*, Hadiya *dāneččo*, (Borelli) *dané*, Kambatta *danieččo*, (Leslau) *zanō*, Quabenna *zanō*, Tambaro (Borelli) *zanoččo* (Dolgopolskij 1973, 107; Leslau 1980, 125); Yaaku *sogómèi*; SCush *‘dax-* (Ehret 1980, 166) > Dahalo *dokomi*, *ḡokomi*; Iraqw *dañw*, Gorowa, Alagwa, Burunge *daw*; SOm: Hamar *donger*, Bako *dongor* (Fleming 1976, 318); NOm: Bambeši *tonḡile*, Sezo *tonḡili*, Hozo *tanḡil*, *tonḡil*; Nao, Maji *dōr*, Šakko *dorō*; Kafa *dangiyō*, Moča *dāngao*, Šinaša *dangeša*, Anfillo *dangeččo*; Zaise *dongor*; Wolaita, Gofa, Basketo, Čara *dangarsā*, Zala, Kullo *dangarsa*, Doko *dangars*, while the forms with initial *z-* probably conserve the old protoform of CCush or Ethio-Semitic: Janjero *zaknō*, Kačama, Koyra *zākkā*, Gofa (Fleming) *zakki*, Ganjule *zakka*. The possibility, that the same root existed in Beja, is not excluded either. The sought word (*‘danhar-*?) can be reflected in late Eg *dnhr*, Demotic *tnhr* (Müller 1896, 203–205; Störk 1975, c. 1214–5). If this hypothesis is correct we have here a unique pan-Cushitic – Omotic isogloss.

Two Chadic elephant-names pretend to be the cognates of the quoted Cushitic-Omotic term: (1) (E) Sokoro *dógol* “elephant”, vs. *dūger*, (Friedrich) *dúkur* “rhinoceros”, Tobanga (Jungraithmayr by O. Stolbova) *dūgūrū* “elephant” (cf. WSaharan: Daza *dugugul* “trunk of elephant”, see de Coeur 1956, 306), while (C) Musgu (Krause) *tégene* besides (Röder) *lēgene* and Bana *thogna*, or *chlōna*, com-

pared with EChad and Cush/Om forms by Dolgopolskiy (1973, 107) reflect rather the initial lateral affricate /č/, cf. Masa *Ḫaka*, (Caitucoli) *slōk-ḡā*, (Mouchet) *ḫok*, Banana *ḫok-ḡa*, Musey *ḫlōk-ḡa* “elephant”, also (W) SBAuči: Dwot *nzu'u*, borrowed probably from Jarawan-Bantu **nzoku* < pBantu **jōgḡ* id. (Gerhardt 1982, 91); (2) **ḫiH'an-* > (W) Ngizim *ḫaunāk*; (C) Tera *ḫūwān*; Fali Jilbu *ḫū'wūni*, Fali Mucela *ḫūnu*; (E) Ndam *ḫem*, Nancera *ḫena'*, Gabri *ḫēnu*, Dormo *ḫunu*, Kaba *ḫuno*, Tumak *sūn*, Mawer *sūn* id., with the variant **ciH'an-* > (C) Hwona *cīwānā*, Ga'anda *cūwēna*, Gabin *cūwēne*; Bura *cīwāf*, Čibak *istīwāf*, WMargi *cīwar/cīwir*, Ngwaxi *cīwāf*; Kilba *čīwār*, Hildi *cīwarū*, Wamdin *cīwār*; Margi *cīwāf*, (Hoffmann) *čūwār*; Higi Nkafa *cūwe*, Higi Baza *cīwē*, Kapsiki *cūwe*, Higi Ghye *cīwe*, Higi Futu *cūwe*, Fali Kiria *cūwīnu*, Fali Gili *cīwu*; Gude *conā*, Koboči, Nzangi *čūārē*, Mwulyen *čūwā*, Bata Demsa *čūē*, Wadi *šua*, Holma *šūārē*.

An internal AA etymology is dark. Perhaps certain external parallels exist, cf. Kordofan: Šabun *zongor*, Kawama *dognor*, pl. *djognor*, Kanderma *dōnōro*, pl. *ignoro* (but the initial *d/dj/z* can be the old prefix, in this case the root **-oḡor* is the exact cognate of NS **aḡwal/r* – see n. 8), maybe also Niger-Congo: Adamawa: Were *dan(g)*, Kolbila *dōna*, Čamba-Laego *dōnā* (Strümpell 1910, 466) and NS: Berta (Marno) *dagn* “ox”; CSudanic: pŠari *daga* “bison” (Thayer 1976, 49). On the other hand, this doubtless archaic AA zoonym has a hopeful cognate in Nostratic: Altaic **ḫiŋgʷan* “elephant” > Turkic **jiGan*, Mongol **ḫigan* (Räsänen 1969, 177–8) confirming the oldest age just of this elephant-name in AA.

10) Also the terms naming a “rhinoceros” use semantical motivations similar to those in the case of “elephant”. Besides late constructions of the type of Arab *waḥid al qarn*, *umm al-qarn* or Sudan Arabic *abu qern* borrowed e.g. in Nubian (Dair *buger*) or Sungor *abugern* id. or Baiso *gasi* “rhinoceros” vs. Afar *gasi* “buffalo” from ECush *gays-* “horn” (Fleming 1964, 54; Sasse 1979, 33, 44) much older forms derived from the word “horn” exist. So Eg *skb* “rhinoceros” (Störk 1980, 351–2) can be formed from the AA **sVk/k-* “horn” reflected in WChad: Čip *sokom*, Ankwe *sogom*, etc. “horn” (Stolbova 1987, 178) and Berb **-sikaw-* id. > Ghadames *aškaw*, Siwa *aččao*; Ahaggar *isik*; Zenaga *tiska*; Semlal *isk/askiwn*, Rif, Nefusa *aššaw* id. (Militarev), maybe also SOM: Ubamer *šuk(u)malšoqma* “claw”. The puzzle Akkadian name of unicorn or rhinoceros *sakēja* known from the obelisk of Salmanassar III (Landsberger 1934, 143) may have the same origin.

11) SCush *dof-* > Iraqw, Alagwa *dofa*, Burunge *dofimo*, Qwadza *dofuko*, Asa *dofuk/defet* m./f. “rhinoceros” (Ehret 1980, 166), has probable cognates in Eg (AK) *db* “hippopotamus” (EG V, 433) and CChad: Musgu (Rohlf) *defān* “bull”. But again, all zoonyms can be derived from the AA root known from Eg (Med) *db* “horn” (EG V, 434) and CChad: Banana *ādifā* id. (Lukas 1937, 135). On the other hand, there are NS parallels, too: pKuliak *dōb* “rhino” and Surma: Majang *depe* “elephant” (Fleming 1983, 459).

12) Rhinoceros, hippopotamus or elephant – all three sememes can probably be traced to one and the same AA root: Mbugu *maḡa* “rhinoceros”, Burunge *maxu*, Alagwa *maxwi* “hippopotamus” (Ehret 1980, 155), SCush > Sandawe *maxunko* id. (Ehret 1974, 70); EChad: Bidiyo (Alio) *múgú* “elephant”, Kera Fianga (Lukas) *témege* “rhinoceros”. The source can be sought again in the word for “horn”, cf.

CChad: Gidar *mōhō*, Masa (Mouchet) *myok*, Banana *miyēka*, Musgu (Krause) *mōḡo*, (Decorse) *omok*, Munjuk *ámíyók*, etc. On the other hand, a certain NS influence is not possible to exclude, esp. on SCush, cf. WNil: Ačoli *amúgga*, Jur *umuó*; ENil: Bari *mui*, Masai *e-munš* “rhinoceros” (Schuchardt 1912, 38) and/or ENil: Latuka *a-moxwo*, Masai *e-mowwo* “(signal-)horn” (Hohenberger 1958, 394), or also ENil: Masai *ol-makau*, SNil: Nandi *makas*, Suk *moko*, Lumbwa *makai* “hippopotamus” (Hohenberger 1958, 387); CSudanic: Kreiš *maḡūḡu* id.

13) ECush *warš-* “rhinoceros” (Sasse 1979, 33, 54), or *waršay-* (Haberland, Lamberti 1988, 147) > Oromo *worsēsa*, Konso *oršayta*, Gidole *oršayt*; Gollango *oršarte*; Baiso *wōrsēsa*; Burji *wōrša* id., Hadiya *oršā-ado* “rhinoceros’ horn”, has two possible etymologies: (a) Borrowing from Ethio-Semitic **arwē ḡarīs* > Gz *arwe ḡoras*, *awrāḡars*, *awrāris*, *awriḡars* and *ḡarīs*, *ḡaris*, *ḡoras* (> Arab *ḡarīs* id.), Tna *ḡariš*, *awrariš*, Amh *haris*, *awraris*, etc. (Leslau 1987, 48, 244), perhaps with an original meaning “beast of mountains”, cf. Sem *ḡurš-* “mountain, forest” (Gesenius, Buhl 1921, 264), similarly as Gz *arwe midr* “snake, serpent, dragon” lit. “beast of earth” (Leslau 1987, 40). This is a point of view of W. Leslau (1988, 201). But the borrowing of the name of a typical representative of African fauna from originally non-African languages in ECush (Yaaku!) is improbable, mainly chronologically. Since there is a promising internal AA etymology for ECush *warš-*, the resemblance of Ethio-Semitic and ECushitic represents rather an accidental coincidence. Therefore, I prefer the following explanation:

(b) ECush *warš-* “rhinoceros” has parallels in Chad: (W) Angas (Foulkes) *wīlī* id. and perhaps (C) Mbara *wi(r)ḫi/wūrḫā*: “cattle”, if we accept the correspondence *-š-*, *-l-* and *-ḫ-*, doubtless reflecting the old lateral sibilant (Militarev). But this comparison does not exclude the internal structure of this zoonym. The reconstruction *waršay-* can be analysed as a composite of ECush *war-* > Daseneč *warr* “mountain”, Hadiya *wor* “forest” and ECush *šā-* “cow” (Sasse 1979, 36).

14) The other ECush term for “rhinoceros”, pSam *wīyyèl*, reconstructed on the basis Somali *wiyil*, Rendille *wéḫel*, pBoni *wóól* (Heine 1981, 198; 1982, 124), and its cognate in Dahalo *wala* (Damman), *wāla* (Ehret 1974, 68), can be related to some Chadic names for “hippopotamus”: (W) Angas (Foulkes) *wūšār*, (C) Muskum *wūzil*.

15) Beja *šē*, pl. *ša* “rhinoceros” has only doubtful parallels in NOm: Kačama *šoro*, if we accept the lost of *-r-* in Beja, or Basketo (Fleming) *ošá*, Wolaita *oswā*, Zala *osoā* id., if these forms are not borrowed from ECush *warš-* (see n. 13b). The CChad forms as Kulung *sō*, Banana (Lukas) *āšō'a* “elephant” or Lame (Lukas) *zé* “hippopotamus” represent rather different roots.

16) The isolated NOm word for a “rhinoceros”, Zaise *mulē*, has a possible (areal?) parallel in NS: Surma: Mursi *mīle* (Haberland 1966, 94), Tirma *mulyoḡ* id. (Fleming 1983, 459) compares also with Kuliak: Nyangi *mūny* id. – but cf. n. 12). Is there any connection with Cush *mayloḡ-* “(removed) horn” > (C) Bilin *mālxat* “long trumpet”, (E) Yaaku *maylog* “horn” (Ehret 1987, 66)?

17) Paradoxically, most described terms for “rhinoceros” in Chadic represent cultural words or old borrowings, e.g. Hausa *karkanda* from Arab *karkand*, *karkaddan* (similarly Tuareg Azawāḡ *tagergeddu*, Nile-Nubian (Reinisch)

kargedān, Coptic *xarkinos* id. (Vycichl 1983, 246–7) or (C) Masa (Lukas) *bórni*, Musgu (Röder) *bīrni*, Muskum *birni*, (E) Somrai, Ndam, Nancere, Gabri, Kwang *birni*, Kaba *burni* vs. Arab *barnīq* id. cf. also NS: CSudanic: Kenga, Kuka *birni*, or (E) Mukulu *páttò*, Kera Tuburi (Lukas) *pasi* vs. Common Bantu **pédà* “rhinoceros” (Guthrie).

18) The analysis of the terms for “hippopotamus” shows a richer spectrum of semantical motivation than in the case of preceding zoonyms. For instance, Egyptian uses a lot of late innovations: **h₃* “fighter”, *wr* “the great”, *hd.t* “the white”, *dšr* “the red”, *dns* “the heavy”, *nš(n)* “ferocious”, *hrj-ntj* “being in water”, *k₃-mhj* “cattle of swamp” (Störk 1981, c. 501–506), besides the archaic terms *db* (see n. 11) and *h₃b* (EG III, 229). Egyptologists interpret this zoonym as “the animal with crooked tooth” (Lacau) or “the cunning, false, traitorous” (Störk 1981, c. 501–506). Mukarovskij (1959, 7; 1976, 410: pWNigritic **gwab-*) connects it with Niger-Congo “hippo”: Ful *ngabu*, pl. *gabi*; Dyola *e-kav*; Bulom *i-pak* (metath.); Common-Bantu **gùbú*, **gùbú*, **gùbú*. But there are plausible AA parallels in Cushitic: (C) Xamir *biwā*; (E) Rendille *ibeh*, (Schlee) *ibe*, pl. *ibénye*; Arbore *yibéh*, Elmolo *yéhe*, *yé* (1973), pl. *yéme* (1980); (S); Iraqw *hàwēwē mō* id. (Elderkin 1988, 493). Some Cushitic languages seem to be a source of Gz *biḥ*, *biḥe*, *biḥ*, *biḥe* “hippopotamus” (this word is usually interpreted as a loan from Coptic (*p-jehe* “cow” (via Egyptian Arabic *bīḥ*) or *iḥ* “demon, monster” again with an affixal article (Leslau 1987, 93). On the other hand, Hbr *bihemōt* “hippopotamus” (corresponding with plural of *bihēmā* “cattle” (Gesenius, Buhl 1921, 86), cf. Arab *bahīmat* “animal”), borrowed in Gz *bihemot*, *bihemot* id. (Leslau 1987, 90), could contaminate the old Cushitic zoonym. A similar term exists even in NS: CSudanic: pŠari **aba* > Mbay *yàb*, *hab*, Bongo, OSara *haba*, OBagirmi *’ab(o)* id. (Thayer 1976, 67); SNil: Datooga *hōburš*, Omotic *obirēta*; Kuliak: Ik *obi’š* “rhinoceros” (Rottland 1983, 497) and perhaps in KH: Khoe *ngyáBá*, Nama *!nawa-s* “rhinoceros” (Köhler 1966, 149). And so the remarkable Eg-Cush isogloss may have an areal origin (cf. also the later loans in CChad: Nzangi *ngábbu*, Mofu-Gudur *ngábaw*, Gisiga *’abu ngabu* from Ful).

19) Other Cushitic term for “hippo” can be reconstructed as **gumar-* > (C) Kemant *gumārī*, Qwara *gumārē*, *gumārī*, Xamir *gumārī*, Xamta *gumār*, Awngi *gumārī*, (Beke) *gomārī*; (E) Saho *gumārē*, Afar *gumārī* (< CCush ?); OSomali *’geero-* (Lamberti 1986, 248) > NSomali *šēr/cēr*; Jiddu *širi*; Boni *sēr*; Elmolo *gūris* id., Arbore *girač*, *gurēč* “rhinoceros”; Qabenna *gomarra*, Tambaro *gumorra* (Leslau 1979, 278), *gumara* (Borelli) “hippopotamus”. Probably some old CCush form passed in Ethio-Semitic: Tna *gumarre*, Te *gomārī*, Amh *gumarre* (>Gz *gomārī*, *g’imārī*), Harari *gumarre*, Wolane *gomare*, Čaha *g’āmanā*, Gyeto *g’āwanā*, Endegeñ *gā’irā*, etc. (Leslau 1979, 278; 1987, 195), although there is a promising Semitic cognate in Ugaritic *gmr* “a kind of animal capable of fighting ferociously” (C.H. Gordon, *Ugaritic Textbook*. Roma: Pontificium Institutum Biblicum, 1965: 380), confirming the Semito-Cushitic age of this zoonym. The Ethio-Semitic (Gurage ?) source is the most probable for the following forms: Kullo *gomāra*; Janjero *gumāu*; Šinaša (Beke) *gōma*, (Schuver) *gomia*, Kafa *gomānō*, (Cecchi) *gomého*. This zoonym has more alternative etymologies: a) The model of the type

of Arab *ḥiṣān al-baḥr* “hippo”, lit. “horse of river”, cf. Greek *hippo-potamos* id. or Kenuzi (Reinisch) *essi-n-ti*, *essiti*, *éssin šamūs/gamūs* “hippopotamus”, lit. “cattle of river”, composed from *ássi*, *éssi* “river, water” and *ti* “cow”, or *šamūs/gamūs* “buffalo” (< Arab); Nile-Nubian > Beja *ásin*, *isín*, pl. *isena* (Reinisch 1895, 31; 1911, 98). The similar interpretation of the Cush term based on the Berb **a-gumār* “horse” > Siwa, Ghadames *a-gmār*, Zenaga (Nicolas) *i-gmir*; Semlal *a-gmār*, Nefusa *a-gmār*, etc. (Militarev), maybe Chad **gam* “ram” (Newman 1977, 30).

b) The model “aquatic animal” → “hippo” – cf. pBantu **-γamba* (Meinhof, Warmelo 1932, 194) > Konde *ka-šamba* “tortoise”, Sotho *le-t’ap’e*, Venda *damba šek’wa* “crab” vs. Ndonga *o-ndyamba* “hippo” and even Kuang *o-ndaba* “elephant” or Kunama *aynima* “crocodile”, but by Munzinger *hainuma* “hippo” or Afar *ulúm* “hippo” vs. Saho *ilmā* “crocodile”; Beja *léma* id. (> Nile-Nubian *elúm*); Bilin *ālmā* “sp. snake”. This interpretation of the Cush term is based on its hypothetical derivation from the AA root presented in CChad: Musgu (Rohlf) *gēmi* “tortoise”, cf. (Rohlf) *gimmer*, (Krause) *gumurī*, etc. “shield”.

20) ECush **robH-* “hippopotamus” > Oromo *rōbīrōpi*; Sidamo *robē*, *robicco*, Darasa *rōpe*, Kambatta *lōbičču* (both Leslau), Hadiya (Plazikowsky-Brauner) *lōbiččo*, gen. *loš*, Burji *rōbē* (Dolgopolskiy 1973, 170; Sasse 1982, 160; Leslau 1988, 198) can be of the same origin as ECush **arb-* “elephant”, Eg *šb.w* id. and *irbš* “rhinoceros”. But there are also other possibilities. Besides the semantical motivation “hippo” = “aquatic animal”, based on AA **rub-* “wet” > Sem **rbb* “to rain”; ECush **roob-* “rain” (Müller 1975, 67); WChad **ruḥV* “wet” (Stolbova 1987, 236) again external, namely NS, parallels exist: CSudanic: Madi *rubbī*; WNil: Šilluk *rau*, Dinka *rou*, Nuer *rou*, Lur *rāwe*, Ačoli *rā* “hippo”, ? ENil: Bari *ša-ro* (Schuchardt 1912, 35; Greenberg 1963, 101).

21) The semantical connection of hippo and other aquatic/wild animals is evident in the case of ECush **dul-* > Afar *dūlu*, Somali *dōl* “fierce animal; sp. ante-lope”, d. Mijurtein, Benadir *duša* < **dul-ta* “hippo”, Jiddu *dōl* “a giant crocodile” (?), Baiso *dulo* (Fleming 1964, 51), *dūlo* “hippo”, Konso *tulpēta* “hippo/pig” (cf. Burji *bōyē* “hippo” vs. *bōyyē* “domestic pig”, both from ECush **bōy(y)-* “naked” by Sasse 1982, 40); Dullay: Gollango *tūlpe*, Gawwada *tullupe* “hippo” (Haberland, Lamberti 1988, 89). The possible connection with WChad: Hausa *dōrīna*, Gwandara *dōrina*; Miya *dōrinā* (< Hausa?), Tsagu *dōrānā*, etc. “hippo” proposed by Mukarovskij (1987, 207) still together with Mande: Bobo *dūrū* id., Mano *dudu*, lulu, Dan *duro* “crocodile” is doubtful for its problematic correspondence *l/r*. Similarly, Bokkos *tīlis*, Ša *tīlis* “hippo”, Daffo-Butura *tīlis* “a big animal living in the water” represent doubtful cognates for voiceless anlaut.

22) It is not excluded that the initial *t-* in Kera *tūnī* f. “hippo” is an old prefix of fem., but if the *t-* belongs to the root, it is possible to connect it with Sem **tannīn-* “mythical water monster, dragon” (Aistleitner 1963, 327; Fronzaroli 1968, 286, fn. 88).

23) The isolated Dahalo (Damman) *na’e*, (Elderkin) *náhe* “hippo” has hopeful cognates in Chad: (W) Kirfi *nāyāyi*, Bole (Benton) *nēm*; (C) Kotoko: Logone *niē*, Buduma *nay*, Ngala *nai*, Makeri *nae*, *ney*, Gulfei *ney*, Afade *ney*, *nay*, Klesem

anne, Kuseri *arə* (Sölken 1967, 242); Lame (Sachnine) *nē'e* id. The etymology is obscure if we do not accept any connection with Niger-Congo "elephant" (see n. 8) or with isolated CSudanic: Lendu (Tucker) *nya* "hippo".

24) NOm: Kačama *azāgē*, Koyra *azzāgē*, *azzagi*, Ganjule *azagé*, Basketo (Fleming) *azāma* "hippo" have promising cognates in Chad: (W) Nbauci: Siri *ʒiŋwa*, Diri, Pa'a *ʒuŋgwa* id. (Skinner) and Ngizim *āzagūm* (Schuch); ? (C) Gidar *ʒōmi*, Lame (Lukas) *zé* id.

25) NOm: Wolaita *tādyā*, (Beke) *tsade*, Kullo *tadia*; Mao (Grottanelli) *tsoeddi*; SOM: Dime *čid* "hippo" (Fleming 1976, 319) can be hypothetically compared with WChad: Ron: Ša, Kulere *didām*, Daffo-Butura, Bokkos *tidām*, Fyer *tidiš* "elephant".

26) NOm: Doko *yeringē*, Gofa (Conti Rossini) *yerunšē*, Malo *yeringā*, Kullo (Conti Rossini) *yerunzā*, Basketo (Fleming) *yerinsa* "hippo" probably have substrate origin, cf. NS: CSudanic: Baka (Thayer) *ároa*, Logo *ariwa*, Ojiga *arúwà*, Luluba *yarU* (Tucker); Nile-Nubian (Reinisch) *erit* "hippo"; Surma (Haberland): Bodi, Mursi *āro* id.

27) Probably only one of the known terms for "hippo" in Chadic has an evident internal etymology: (C) Masa (Mouchet) *gáryam*, Banana (Lukas) *gariamba*, Muzgu (Krause) *gériam*, (Rohlf) *gárium*, Vulum, Mbara *gariyám*; (E) Tumak *girim*, Mubi *girimti* "hippo" vs. Muzgu *gari* "(big) bull", Muskum *gèrré*, Vulum *gàri*: "bull" plus Musgu *yem*, *yim*, etc. "water".

28) "Hippo" appears in Berber lexicons only rarely. Tuareg Ahaggar (Foucauld) *bañro*, Aulemidden *tanaynet* and Zenaga (*n*) *neber'* (both Basset) reflect probably a certain language union connecting Songhai (*baña* id.) and Atlantic (Wolof-Serer *léber* id., see Basset 1887, 455).

Conclusions

This contribution has the following aims: 1) to collect a basic terminology; 2) to differentiate zoonyms with analysable semantical motivation, borrowings and etymologically obscure terms (if the latter also have a wider distribution it is probable that they represent the most archaic level of zoological lexicon); 3) to interpret the results.

A similar picture is probable e.g. in the case of Indo-European languages. Some zoonyms have an evident semantical motivation based on certain characteristic features such as "horn(s)" or "hornless", "(living in) water", "running", various colours, etc. Zoological terminology concerning "exotic fauna" (elephant, camel, lion, monkey) is usually borrowed. The other zoonyms with obscure etymology and wider distribution have often Nostratic parallels (fish, dog, stag, etc.). On the other hand, Tocharians or Indo-Aryans after coming to places with different ecological environment transformed the meanings of some original terms according to external resemblance (e.g. "stag" → "gazelle") or they formed innovations or borrowed names for unknown animals from local languages.

An analogical situation, only on the deeper chronological level, can be expected in the case of Afroasiatic languages. I chose three typical representatives

of African fauna, elephant, rhinoceros and hippopotamus, although they are not strictly limited only to African territory. The elephant was still known in the 2nd millennium B.C. in West Syria, where it was hunted by Pharaoh Thutmose III (1464 B.C.) and in the basin of the Euphrates, where Assyrian kings hunted it (Salonen 1976, 14). The rhinoceros is supported only from isolated discoveries in Barda Balka (Iraq) and Galilea, both from the early Stone Age (Salonen 1976, 14; Šnirelman, June 1990, personal communication). The hippopotamus is described in the Old Testament (Job 40.15) as a terrible aquatic monster. But it was limited to Western Asia in the swamps of the Jordan basin.

Our analysis allows for the formulation of the following hypotheses:

(1) The oldest name of "elephant" in AA is **ʒi[kʷ]an/r* (n. 9), probably with Nostratic cognates.

Other elephant-names have more or less hopeful internal AA etymologies or they can be interpreted as NS or NC borrowings although in some instances it is not possible to decide which variant is primary.

(2) Rhinoceros probably does not belong to common AA lexicon. Only **wuʒyal* (n. 14) has a relatively wider distribution in the AA area, it is without internal AA etymology and contemporarily without parallels in African languages. But Chadic cognates mean "hippo" and so the original meaning is not evident.

(3) The original word for hippopotamus is also reconstructable problematically on the AA level. The data resemble independent borrowings from common substratum. The most promising is n. 21, which can be reconstructed as **durV*, if we accept the development **durl-* > **dull-* (Gawwada *tullupe*) > **dul-/dül-* in ECushitic (analogically perhaps Sem **pīr-/pīl-* < **pir-l-* "elephant", see n. 1). The original protoform of n. 24 can represent the composite **ʒikʷan* + **yam* "water-elephant" (but Omotic data suppose **d-*, cf. n. 9) or **ʒak/gi* + **yam* "water-ass", cf. WChad **ʒaki* "ass" (Stolbova 1987, 194); CChad: Glavda *azungwa* id. (Skinner 1977, 18); Berb: Zenaga *ažig* "ass" (Woelfel 1955, 61). The third term, perhaps **nahyV* or a similar one (n. 23) is too poorly supported (excluding Chadic).

So, I see the following picture: the elephant and hippopotamus probably lived on the territory of the AA homeland while the rhinoceros not. This pattern allows localizing the sought homeland in Syro-Palestinian region, the territory where the bearers of Natufian mesolithic culture began their "invasion" of Africa from. Of course, this conclusion cannot be definitive. Only new and independent arguments will confirm or disprove this hypothesis, originally formulated by A. Militarev, V. Šnirelman and supported by I.M. Diakonoff.

Abbreviations: AA Afroasiatic, Akk Akkadian, Amh Amhara, Arab Arabic, Aram Aramaic, Berb Berber, C Central, Chad Chadic, Cush Cushitic, d. dialect, E East, Gz Geez, Hbr Hebrew, Ind Indic, N North, NC Niger-Congo, Nigr Nigritic, Nil Nilotic, NS Nilo-Saharan, O Old, Om Omotic, p proto, Pers Persian, S South, Sem Semitic, Syr Syriac, Tc Tigre, Tna Tigrinya, W West. Basic sources for the languages where the author is not quoted in text: Amborn, Minkler, Sasse – Dullay; Barreteau – Moftu-Gudur; Beke – Gafat; Borelli – Kullo, Tambaro; Caprile – Mawer, Tumak; Cerulli – Anfillo, Basketo, Čara, Gofa, Hadiya, Janjero, Kafa, Kambatta, Koyra, Maji, Nao, Sidamo, Šakko, Šinaša, Wolaita, Zala; de Colombel – Hide, Lamang, Magumaz, Mefelē, Paduko; Conti Rossini – Awngi,

Doko, Kačama, Kemant, Še, Xamta; Cowley – Kunfāl; Ebert – Kera; Fleming – Bambaši, Ganjule, Hozo, Sezo, Ubamer; Hayward – Arbore, Baiso; Heine – Boni, Elmolo, Rendille, Yaaku; Jungraithmayr – Ron; Kraft – Ankwe, Bade, Banana, Čibak, Čip, Daba, Dwot, Fali Gili, Fali Jilbu, Fali Kiria, Fali Mucela, Ga'anda, Gabin, Gava, Glavda, Gude, Higi Baza, Higi Futu, Higi Ghyc, Higi Nkafa, Hildi, Hwona, Kapsiki, Kilba, Lame, Margi, Masa, Misme, Musey, Mwulyen, Nakatsa, Ngwaxi, Peve, Seya, Wamdiu, Wandala, WMargi, Zeghwana; Leslau – Moča; Lukas – Buduma, Dormo, Gabri, Gisiga, Hidkala, Kaba, Kenga, Kuka, Kulung, Kwang, Logone, Mubi, Mukulu, Musgu, Nancere, Ndam, Sokoro, Somrai, Sungor; MacMichael – Zaghawa; Meinhof – Kordofanian, Kreiš, Nubian; Mouchet – Gidar, Nzangi; Newman – Tera; Newman, Ma – Duwai, Vizik; Reinisch – Afar, Barea, Beja, Bilin, Dembea, Kunama, Qwara, Saho, Somali, Xamir; Schuch – Ngizim; Seignobos, Tourneux – Baldamu, Munjuk; Skinner – NBauči; Strümpell – Bata Demsa, Dari, Holma, Koboči, Musugeu, Muturua, Wadi; Tourneux – Muskum; Tourneux, Seignobos, Lafarge – Mbara, Vulum.

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- RRAL Rendiconti della Reale Accademia dei Lincei. Cl. di sc. mor., stor. e filolog.
- RSE Rassegna di studi etiopici.
- RSO Rivista degli studi orientali.
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- SAW Sitzungsberichte der Akademie der Wissenschaften. Philos.-hist. Cl.
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BOOK REVIEWS

NOPPEN, Jean-Pierre van – HOLS, Edith: *Metaphor II. A Classified Bibliography of Publications 1985 to 1990*. Amsterdam – Philadelphia, John Benjamins Publishing Company 1990. ISBN 90 272 3746 8 (Eur.), 350 pp.

This volume is an appreciated continuation of Warren Shibles' survey published in 1971 and Noppen's bibliography published in 1985. The compilers have systematically followed papers and books on the subject of metaphor but have decided to include remarkable references that are for some reason or another absent from either Shibles' (1971) or Noppen's (1985) bibliographies.

According to the authors, the impetus to the compilation of Volume II of this bibliography was given by the research team of Professor Harald Delius at Mannheim University; Mannheim additions are marked MA in the text. Data contributed by E. Hols are marked EH.

The project has been supported by the Belgian Research Foundation, and a network of participants from all parts of the world has been created. This has resulted in a more exhaustive coverage that includes, at least to some extent, Eastern Europe. Some references have been taken over from other available bibliographies on metaphor and the latter are likewise acknowledged in the text.

Despite concentrated efforts, Noppen's and Hols' bibliography is not 100 % exhaustive, which is not meant as a criticism here. The reviewer appreciates the ambition of the authors to extend their scope so as to present not only the research of metaphor in linguistics and literary theory but also that in psychology, psychiatry, sociology, economics, and even biology and medicine. This is a welcome exertion, for metaphorical mechanisms operate in the very core of our cognitive attitude and activity within the world.

The authors conclude their Preface with an invitation to the users of their bibliography to contribute to the data bank with bibliographical information on the subject of metaphor.

The bulk of the publication is taken up by some 300 pages of alphabetically classified bibliography including some 3,000 bibliographical entries. Noppen 1985 contains some 4,200 items but while the latter covers some 15 years of research in metaphor, the present bibliography sums up only five years of research but with a much higher degree of inclusivity. An entry is introduced by the family name of the author(s), followed by the year of publication, by the title of the publication in the original (with its English translation if the item is published in a less accessible language, such as Romanian, Japanese, Slovak, Polish, etc. Quite a few entries contain brief content characteristics in English. In addition to books and papers, reviews and dissertations have also been included. The ratio of non-English sources is higher than expected and the titles of Eastern European publications are no exception in the text. The latter, however, tend to suffer from misprints, e.g. Naukaa Dumka instead of Naukova Dumka (publisher's name), ZhoI instead of ZoI (an author). The transcription of Russian words ought to be unified;