

Chapter 12

The Prehistory of a Dispersal: the Proto-Afrasian (Afroasiatic) Farming Lexicon

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Added below are more than thirty common Afrasian (Afroasiatic, Semito-Hamitic) terms, most of which obviously relate to farming, while some may relate to either farming or the collecting of wild cereals and fruit. Almost all of these terms are attested in more than two branches of the Afrasian linguistic family, a fact which proves their Proto-Afrasian origin. There are also several dozen other terms not included because of their narrower attestation; nevertheless they make a promising base for future research. In any case, the lexicon presented seems sufficient to assert that the Proto-Afrasians were a farming people.

The Proto-Afrasian language, on the verge of a split into daughter languages, should be roughly dated to the ninth millennium BC. This date is later than those which I proposed in Militarev 2000 (see Tree on p. 303), these being the tenth millennium BC for the separation between the Northern Branch of Afrasian (Egyptian, Semitic, Chadic and Berber) and the Southern Branch (Cushitic and Omotic), and the ninth millennium BC for successive separations between Egyptian and Semitic-Chadic-Berber, and between Semitic and Chadic-Berber, on the one hand, and Cushitic and Omotic, on the other.

My reasons for this correction are as follow. Starostin's method in glottochronology (see Starostin 2000) requires a thorough etymological analysis to detect and eliminate loanwords from the scores. The criteria and techniques used in detecting loanwords in a basic lexicon of Semitic, Egyptian and Berber are more or less satisfactory, something which cannot be said of Chadic, Cushitic and Omotic. With future progress in comparative Afrasian studies, an expected rise of revealed loans to be eliminated from the 100-word lists (resulting in the reduction of the number of items) of some if not many individual languages should increase the proportion of each of

these languages' cognates with any other related language, thus decreasing the time span from the split of their common proto-language. Therefore, the time of the Proto-Afrasian split obtained from a formal comparison which ignores unrevealed loanwords has to be corrected towards a somewhat later date. However, since the 100-word list contains rarely-borrowed words, this correction should not be significant. I would estimate the expected average number of loanwords at 5–8, i.e. 5–8 per cent. This roughly corresponds to the ninth millennium BC as the most realistic and cautious dating for the split of Proto-Afrasian into Cushitic, Omotic, Egyptian, Semitic and Chadic-Berber (the latter being the only couple showing a conspicuous rise of common items in the diagnostic lists, which, with all reservations, seems to me somewhat more significant than a mere result of long linguistic contacts and, hence, both-way lexical borrowing).

The Proto-Afrasian speakers can be identified, with high probability, with the creators of the Natufian and Post-Natufian Early Neolithic archaeological culture of the Levant. We propose the following criteria for identifying habitats of reconstructed proto-language speakers characterized by a specific archaeological culture (or several cultures), in other words, for locating a proto-language's 'home' (see Militarev 1984b; Militarev & Shnirelman 1984; 1988; Militarev 1996). First, dates estimated by both linguistic and archaeological methods should generally coincide. Second, the two pictures of the material culture (as well as elements of the intellectual culture and social organization) and natural environment of the presumed homeland, one reconstructed on the evidence of the proto-language lexicon, the other on the archaeological data, should also basically coincide. Third, there must be traces of linguistic contacts between the proto-language in question

and its early daughter dialects, on the one hand, and other proto-languages or ancient languages likely spoken in the same area during the corresponding periods, on the other. Fourth, presumed routes of the daughter dialects migration to their historically attested habitats should correspond to the directions of ethno-cultural expansion established archaeologically.

The identification of Proto-Afrasians as Natufians and Post-Natufians seems to satisfy all the four criteria. Besides the farming lexicon, there are sets of reconstructed Proto-Afrasian terms pointing to incipient animal-breeding (Militarev & Shnirelman 1984; 1988); a wide variety of dwelling and settlement types (Militarev & Shnirelman 1988; Militarev *et al.* 1989); a territory characterized by both desert and steppe-forest type of terrain and drying river-beds as well as deep permanent streams; a vegetation typical of such territory; and the animals whose bones have been found at the Natufian and early Neolithic Post-Natufian sites (interestingly, there is a large number of common Afrasian terms denoting flocked ungulate animals usually inhabiting steppes and semi-deserts: see Militarev & Shnirelman 1988). A strong argument against the idea of an African homeland for Proto-Afrasian proposed by some authors (see Olderogge 1952; Diakonoff 1981; Ehret 1979) can be based on the linguistic contacts revealed between African (non-Semitic) Afrasian branches and North Caucasian, on the one hand (Militarev & Starostin 1984; Militarev 1996), and Sumerian on the other (Militarev 1984a; 1995; 1996). Finally, the Levant appears to be an attested region from where population began to spread starting in the Early Neolithic, covering not only wide tracts of Southwestern Asia, but also the adjacent parts of the Mediterranean and Africa.

As to the other primary farming centre in the Zagros (likely stemming from the Levant), it may be, albeit highly hypothetically, linked with the speakers of Proto-Sino-Caucasian, a language postulated and reconstructed by Sergei Starostin. There are two more Old World macro-family proto-languages dated approximately to the same period as the Afrasian one, whose cultural lexicon is reconstructed in general outline, namely Sino-Caucasian and Nostratic. According to Starostin (pers. comm.), while in Proto-Nostratic there seem to be no reliable farming terms, the Proto-Sino-Caucasian lexicon contains several such terms, though fewer than Proto-Afrasian. Since there is little doubt that all the three macro-families are eventually related, one may assume that the split of their common proto-language took place during the Natufian period prior to the 'Neolithic Revolu-

tion', after which the Proto-Nostratic speaking group(s) left the Levant, while the Proto-Sino-Caucasian speaking group(s) moved from the Levant to the Zagros area after agriculture and animal husbandry were introduced. Because there are very few agricultural terms common to Proto-Afrasian and Proto-Sino-Caucasian, one may assume that the Sino-Caucasian speakers left the Levant very soon after the 'Neolithic Revolution' took a start, carrying with them the attainments of incipient agriculture and only a few terms shared with Afrasian (borrowed from the latter or inherited from the common ancestor) to later develop an independent agricultural lexicon.

In the main, etymological, section of this paper (see below), I adhere to the general principles of comparative-historical method in linguistics and more specific approaches and positions in Semitic and Afrasian comparison expounded in the Introduction to Militarev & Kogan (2000).

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Conventions:

- * marks a reconstructed proto-form
- separates affixed elements from the stem
- V in reconstructed forms conveys a non-specified vowel, e.g. *bVr- should be read 'either *a, or *i, or *u'
- H in reconstructed forms conveys a non-specified laryngeal or pharyngeal
- S in reconstructed forms conveys a non-specified sibilant
- / separating two symbols means 'or', e.g. *?i/abar- should be read 'either *?ibar- or *?abar-'
- () A symbol in round brackets means 'with or without this symbol', e.g. *ba(w)r- should be read '*bawr- or *bar-'
- ~ between reconstructed forms means 'and'.

Abbreviations of languages and language periods:

Adgh. - Adghaq; Af. - Afar; Afras. - Afrasian (Afroasiatic); Akk. - Akkadian; Al. - Alaba; Alg. - Alagwa; Amh. - Amharic; Amrn. - Amarna; Anf. - Anfilla; Ang. - Angas; Ank. - Ankwe; Arb. - Arabic;

Arg. - Argobba; Arm. - Aramaic; Aw. - Awiya; Bač. - Bačama; BD - Book of the Dead; Bib. - Biblical; Bil. - Bilin; Bid. - Bidiya; Bmrn. - Baamrani; Bnn. - Banana; Bol. - Bolewa; Brb. - Berber; Brj. - Burji; Bw. - Bworo; C. - Central; Can. - Canarian; Ch. - Chadic; Copt. (B F S) - Coptic (Bohairic, Fayyumic, Sahidic); CT - Coffin Texts; Cu. - Cushitic; Dah. - Dahalo; Dar. - Darasa; Dat#- Datina, Dem. - Demotic; Dff. - Daffa; Dgl. - Dangla; Dob. - Dobese; E. - East; Eg. - Egyptian; Emp. - Empire; End. - Endegeñ; Enn. - Ennemor; Eth. - Ethiopian; Gaa. - Gaʿanda; Gab. - Gabin; Gaf. - Gafat; Gel. - Geleba; Gez. - Geez; Ghdm. - Ghadames; Gid. - Gidole; Glmb. - Galambu; Glv. - Glavda; Goll. - Gollango; Gr. - Greek Period; Grnt. - Geruntum; Gur. - Gurage; Gwn. - Gwandara; Had. - Hadiya; Har. - Harari; Hbr. - Hebrew; Hgr. - Tahaggart; Hil. - Hildi; Hrs. - Harsusi; Hs. - Hausa; Iger. - Igerwan; Ir. - Iraqw; Izd. - Izdeg; Izy. - Izayan; Janj. - Janjero; Jib. - Jibbali; Jmb. - Jimbin; Jud. - Judaic; Kar. - Kariya; Kf. - Kafa; Khmr. - Khamir; Kmb. - Kambatta; Kon. - Konso; Krkr. - Karekare; Lex. - Lexical Texts; Log. - Logone; MA - Middle Assyrian; MB - Middle Babylonian; Mbr. - Mbara; Mč. - Moča; Med. - Medical Texts; Mhr. - Mehri; Mig. - Migama; MK - Middle Kingdom; Mnd. - Mandaic; Mndr. - Mandara; Mnj. - Munjuk; Mok. - Mokilko; Mpn. - Mupun; Mrg. - Margi; Ms. - Masqan; Msg. - Musgum; Mtkm. - Matakam; Mṭmṭ - Maṭmaṭa; Mw. - Mwulien; Mz. - Mzab; N. - North; Nak. - Nakači; Nan. - Nančere; NE - New Egyptian; Nfs. - Nefusi; Ngm. - Ngamo; Ngz. - Ngizim; Nj. - Njangi; Nkts. - Nakatsa; Nslm. - Taneslem; Ntf. - Ntifa; Oakk. - Old Akkadian; OAss. - Old Assyrian; OB - Old Babylonian; OK - Old Kingdom; Om. - Omotic; Or. - Oromo; Pa. - Paʿa; pB. - post-Biblical; Ph. - Phoenician; Pi. - Pižimbi; Pyr. - Pyramid Texts; Qbl. - Qabylian; Qbn. - Qabenna; Qw. - Qwadza; Qwr. - Qwara; Rnd. - Rendille; S. - South; Sa. - Saho; Sab. - Sabaic; Sam. - Samaritan; SB - Standard Babylonian; Sel. - Selti; Sem. - Semitic; Sghr. - Seghrušen; Shw. - Shawiya; Sid. - Sidamo; Sml. - Semlal; Smr. - Sumrai; Sod. - Soddo; Sok. - Sokoro; Som. - Somali; Soq. - Soqotri; Sum. - Sumerian; Syr. - Syriac; Tait. - Taitoq; Tfl. - Tifilalt; Tgr. - Tigre; Ṭmb. - Ṭembaro; Tna. - Tigriñña (Tigrai); Tng. - Tangale; Tum. - Tumak; Ugr. - Ugaritic; W. - West; Wlm. - Tawllemmet; Wln. - Wolane; Wmd. - Wamdiu; Wrj. - Warji; Wryn. - Ait Warain; Yaud. - Yaudi; Yem. - Yemen; Zgw. - Zeghwana; Zmr. - Zemmur; Zng. - Zenaga; Zw. - Zwai.

Abbreviations of references:

AHw = Soden, W. von., 1965–81. *Akkadisches Handwörterbuch*. Wiesbaden: Harassowitz.

Brock. = Brockelmann, C., 1928. *Lexicon Syriacum*. Halle: Max Niemeyer.
 CAD = Oppenheim, L., E. Reiner & M.T. Roth (eds.), 1956. *The Assyrian Dictionary of the Oriental Institute, the University of Chicago*. Chicago (IL): The Oriental Institute.
 DLU = Del Olmo Lete, G. & J. Sanmartín, 1996–2000. *Diccionario de la lengua ugarítica I–II*. Barcelona: Editorial Ausa.
 DM = Drower, E.S. & R. Macuch, 1963. *A Mandaic Dictionary*. Oxford: Clarendon Press.
 Dull. = Amborn, H., G. Minker & H-J. Sasse, 1980. *Das Dullay: Materialien zu einer askuschitischen Sprachgruppe. Kölner Beiträge zur Afrikanistik 6*, 228–81.
 EG = Eрман, A. & H. Grapow, 1957–71. *Wörterbuch der ägyptischen Sprache I–VII*. B. Berlin: Akademie-Verlag.
 HAL = Koehler, L. & W. Baumgartner, 1994–96, 1999–2000. *The Hebrew and Aramaic Lexicon of the Old Testament I–III*. Leiden, New York & Cologne: Brill. IV–V. Leiden, Boston & Köln: Brill.
 HSED = Orel, V.E. & O.V. Stolbova, 1995. *Hamito-Semitic Etymological Dictionary: Materials for a Reconstruction*. Leiden, New York & Cologne: Brill.
 Huds. = Hudson, G., 1989. *Highland East Cushitic Dictionary*. Hamburg: Buske.
 Ja. = Jastrow, M., 1996. *A Dictionary of the Targumim, the Talmud Babli and Yerushalmi, and the Midrashic Literature*. New York (NY): The Judaica Press.
 JJ = Johnstone, T.M., 1981 *Jibbāli Lexicon*. New York (NY): Oxford University Press.
 JM = Johnstone, T.M., 1987. *Mehri Lexicon*. London: University of London.
 Jung. CLR = Jungraithmayr, H. & D. Ibriszimow, 1994. *Chadic Lexical Roots I–II*. B. Berlin: Dietrich Reimer.
 Kraft = Kraft, C.H., 1981. *Chadic Wordlists I–III*. Berlin: Dietrich Reimer.
 Lamb. Wol. = Lamberti, M. & M.R. Sottile, 1997. *The Wolaytta language. Studia linguarum africanae orientalis 6*, 1–563.
 LGur. = Leslau, W., 1979. *Etymological Dictionary of Gurage (Ethiopic)*, vol. III. Wiesbaden: Otto Harassowitz.
 LGz. = Leslau, W., 1987. *Comparative Dictionary of Ge-ez (Classical Ethiopic)*. Wiesbaden: Otto Harassowitz.
 LH = Littmann, E. & M. Höffner, 1956. *Wörterbuch der Tigre Sprache: Tigre-deutsch-englisch*. Wiesbaden: Franz Steiner Verlag GMBH.
 LS = Leslau, W., 1938. *Lexique Soqotri (Sudarabique*

moderne) avec comparaisons et explications étymologiques. Paris: Librairie C. Klincksieck.

Sas. Bur. = Sasse., H.-J., 1982. *An Etymological Dictionary of Burji.* Hamburg: Helmut Buske Verlag.
SD = Beeston, A.F.L., M.A. Ghul, W.W. Müller & J. Ryckmans, 1982. *Sabaic Dictionary (English-French-Arabic).* Louvain-la-Neuve, Beyrouth: Peeters, Librairie du Liban.

A. Corn, beans, edible plants

1. Afras. **?ary/w- ~ *(?V)w/yar-* 'corn, beans, edible plants' (related to No. 15?)

(?) Sem.: Hbr. *?ōrōt* (pl.) 'mallow, *Malva rotundifolia* (edible)' (HAL, 25); Arb. *?ary-* 'manne, substance végétale qui s'épaissit sur les feuilles des arbres' (BK 1, 27).

Brb.-Can. **Hawr-an/*Harw-an:* Ghdm. *aḫer-n*, Aujila (*a*)*bru-n*, Siwa, Shw. *ar-en*, Mzb. *wir-en*, Qbl. *awr-en* 'farine' (Kossmann 1999, 92; *b* in Ghdm. and Aujila vs. *w/0* in N. Brb. may reflect a laryngeal in the vicinity of **w*); Tenerife *a-hor-en* 'farine d'orge rôti' (Wölfel 1965, 516).

Ch. W.: Fyer *worom* 'groundnuts', Dera *worom* 'beans' (Skinner 1996, 176), Bol. *are* 'seed' (Skinner 1996, 117), Pero *árùé* 'seed' (Frajzyngier 1985, 21; cf. also *ári* 'nut' Frajzyngier 1985, 20), Tsagu *waran* 'beans' (Skinner 1996, 176); C.: Bač. *warey* 'groundnuts' (Skinner 1996, 176), Fali **?yar*, Zgv. *wira* 'millet' (Skinner 1996, 83), Mada *ire* 'semence' (Barreteau & Brunet 2000, 231), *úwwár* '*Mucuna pruriens* (Fabaceae)' (Barreteau & Brunet 2000, 267), Lame *?urū* 'millet' (Skinner 1996, 46), Musey, Bnn. *ira* 'seed' (Skinner 1996, 117); E.: Dgl. *yorwa* 'sorghum' (Skinner 1996, 83), Kera arway 'graines poussant vite' (Skinner 1996, 117).

Eg.: *iwry* 'Bohne' MK (EG I, 56), Copt. (SF) *aro* 'fève' (Vycichl 1983, 15).

Cu. C.: Bil. Khmr. Qw. Damot, Aw. *ar*; E.: Or. *arū* 'Korn, Getreide, Feldfruchte' (Reinisch 1887, 44), Brj. *wór-i* 'cereals (general)' (Sas. Bur., 190), (?) Som. *ara* 'fruits (de terre et d'arbre)' (Cohen 1947, 80; not in Abraham 1962 and Dizionario Somalo-Italiano 1985).

Om. N.: Kf., Mč., S. Mao, Nao *yāro* 'seed' (Skinner 1996, 290).

2. Afras. **bar- > *barr-, baʔr* 'a cereal' (any connec-

tion with no. 16?)

Sem.: Hbr. *bār* '(clean, threshed) grain' (HAL, 153); Arb. *burr-* 'froment' (BK 1, 103); Sab. *br* 'wheat' (SD, 31); Tgr. *barbaro* (redupl.) 'a kind of small, red durra' (LH, 277); Amh. *bər* 'stalk (of barley, wheat); straw'; Mhr. *barr* 'maize' (JM, 51; acc. to Johnstone, from Arb.), Soq. *bor* 'froment' (LS, 98).

Brb.: Hgr. *a-bôra* 'sorgho à gros grain' (Foucauld 1951–52, 84); E. Wlm. *a-bôra* 'sorgho' (Nicolas 1957, 22); Zng. *būru* 'pain' (Nicolas 1953, 180).

Ch. W.: Hs. *iburo* 'a cereal' (Bargery 1934, 472; < **?ibur-*?), Ang. *ḫwèr* 'yam' (< **buʔr-*), Pero *ḫwərōṅ* 'millet' (Kraft; < **buʔr-Vn*, cf. *ḫàrà* 'stalk' Frajzyngier 1985, 21); C.: Log. *bāberā* 'maize' (HSED, No. 265; redupl. < **barbVr-*); Bač. *byàra* 'ground nut' (Kraft; < **bVyar-*); E.: Tum. *ḫar* 'Pennisetum millet' (< **baʔr-*).

Eg.: *b:t* 'eine Körnerfrucht' Pyr.- MK (EG I, 416, 418; < **bVr-*), Copt. (S) *ebra*, (B) *bray* 'grain de céréales et d'autres plantes' (Vycichl 1983, 39).

Cu. E.: Or. *omborii* 'oats' (Gragg 1982, 305; < **?V-mbVr-*, with a secondary *-m-*?); S.: Burunge *baru* 'grain (generic)' (Ehret 1980, 338); Dah. *ḫūru* 'maize' (Ehret *et al.* 1989, 34; < **buʔr-*).

Om. N.: Moča *bàro*, Anf. *baro* 'maize' (Leslau 1959, 22).

3. Afras. **ba/u(?)r-ay-* 'flour, groats' (relative adjective derived from No. 2 implying the meaning 'processed grain') ~ **ba/urba/ur-* (redupl.)

Sem.: Arb. *burbūr-* 'blé broyé' (Blachère *et al.* 1964, 495; redupl. stem).

Brb. **-bVray-*: Ghdm. *ta-bare-t* 'gâteau fait d'un pain' (Lanfry 1973, 27); Sghr. *i-bray-n* (pl.) 'rough flour' (Abdel-Massih 1971, 181), Sml. *i-briy-n* (pl.) 'farine grossière' (Destaing 1920, 124).

Ch. **bu/a(?)r(ay)-*: W.: Hs. *buri, biri* 'the flour in which balls of *fura* are rolled' (Bargery 1934, 134, 111); Ngz. *barbari* 'gruel' (HSED, No. 224; redupl.); C.: Mw. *ḫūrô*; Bač. *ḫūrey* 'gruel' (Kraft; < **buʔr-ay*); E.: Smr. *bura*, Tum. *bař* 'flour' (HSED, No. 224).

Eg.: *b:y* 'etw. Essbares aus Getreide', *b:y.t* 'ein Backwerk' MK (EG I, 417; < **bVrVy*, cf. *brry* 'Art Brot' NE, EG I, 466).

Cu. C.: Khmr. *bura* 'Mehlgrütze' (Reinisch 1884, 349); E.: Som. *bur* 'flour' (Abraham 1962, 36).

4. Afras. **baw/yar-* ~ **?i/a-bar-* 'fig-tree'

Sem.: Arb. *?ibrat-* 'figuier sycomore', *?br* 'féconder un palmier femelle par une greffe mâle' (BK 1, 3); Amh. *ab^war* 'tree like the *warka*' (Kane 1990, 1194; considered by Leslau in LGur., 9 a loan of Or. *habru*, *abru*, *harbū* 'sycamore', which is less likely in view of the cognate Arb. term; *warka* means 'sycamore' Kane 1990, 1508); Wln. *abro* 'k. of tree' (LGur., 9; compared by Leslau, with hesitations, to Amh. *ab^war*).

Brb.: Ghdm. *ēbrēr* 'être fécondé (palmier)', *āberēr* 'fleur de palmier mâle' (Lanfry 1973, 20), Aujila *šēbrēr* (caus.), Siwa *ss-urr* 'féconder un palmier'; Hgr. *ehārēr* id., pl. *ihārār* (compared in Prasse 1969, 68 and Kossmann 1999, 118; <**?i/abVrir*, with a partial reduplication of the stem).

Ch. W.: Hs. *ḡaure* 'fig-tree, fig-fruit' (Abraham 1965, 91; <**?Vbawr-*); E.: Mig. *bāàrà* 'figuier (rouge)' (Jungraithmayr & Adams 1992, 68; <**baw/yar-*).

Cu. N.: Beja *bīr* 'Dumpalm' (Reinisch 1895, 50; <**bVyVr?*); E.: Som. *bāár* 'tree top; *Commelina spec.*'; Rnd. *bāār* '*Hyphaene coracea* Gaertn., *Palmae*' (<**bāār* 'river palm' Heine 1979, 183); Som., Boni *beer* 'garden' (Heine 1978, 54; all <**baw/yar-*); Or. *habru*, *abru*, *harbū* 'sycamore' (LGur., 9; the form *habru/abru* may continue **?abru* or be an Amharism, which is less likely because of the difference in pattern).

5. Afras. **ĉV÷aw-* 'grain, ear (of barley, wheat)'

Sem. **šV÷V̄÷* 'barley, ear of corn; k. of beans': Akk. *še?u* 'barley, grain; pine nut' OAKk. on (CAD š1, 345; AHw, 1222; acc. to both sources, from Sum.; the reading quoted has been recently doubted by Huehnergard), *šu?u* 'pulse, chickpea' Nuzi, MA, SB (CAD š3, 416), 'eine Getreideart' SB, NAss. (AHw, 1294); Jud. *šə÷ū÷it* 'a species of beans' (Ja., 1610), *šə÷it- id.* (Ja., 1611); Arb. *ša÷ā÷*, *ši÷ā÷*, *šu÷ā÷* 'barbe de l'épi', *š÷÷IV* 'se remplir de grains (se dit des épis, des céréales)' (BK 1, 1234); Tgr. *sā÷a÷* 'oats' (LH, 194), *sə÷sə÷a* (redupl.) 'épeautre' (LH, 194); Tna. *sa÷a÷* 'avena, sorta di biada' (Bassano 1918, 202), *sa÷sə÷e* (redupl.) 'sorta di orzo che si semina nella stagione asciutta' (Bassano 1918, 201). Cf. metathetic **÷ay/wš-* 'bread, corn food'; Jud. *÷īs-* 'started dough, quantity of flour used for one person's meal' (Ja., 1072), *÷āšāsīt* 'pounded wheat or peas' (Ja., 1098); Sab. *÷ys₂* ?

cornland' (SD, 24), 'food, provision, produce' (Biella 1982, 363, 368); Arb. (Eg. dial.) *÷ayš-* 'pain' (BK 2, 420), (N. Yem. dial.) *÷awš*, *÷ayš* 'Brot' (Behnstedt 1992–, 878, 884); Tgr. *÷eš* 'bread (of the Europeans)' (LH, 481); Har. *ēs* 'oat' (Leslau 1963, 33).

Ch. W.: Siri *šawi* 'guinea corn' (Skinner 1977, 24). Cf. in Stolbova 1996, 53: W. **ĉaHwa* 'guinea corn'; Sura *šwāa*; Ang. *šwe*; Ank., Tng. *sua* compared to E.: Mig. *čiwwa* 'gros mil (sorgho)'.

Eg.: *š÷.w.t* 'Kuchen, aus Spelt, Fett und Honig' Pyr. (EG IV, 421), *š÷.t* 'Teil der Gerste' Med. (EG IV, 420), *š÷.t.t* 'Art Brot' BD, Med. (EG IV, 418).

Cu. N.: Beja *šūš* '*Panicum Turgidum*' (Reinisch 1895, 218; redupl.); C.: Kem., Qwr. *sewī* 'Aehre' (Rein. Qw., 119); E.: Sa. *suwā* 'grain that ripens' (LGz., 539; all these examples may or may not be loans from Eth., where the similarly looking forms, however, end in *-t-*; Gez. *šawit*, etc. - see LGz., 539); Had. *so?o*; Tmb. *soha* 'barley' (*-h- < *-÷-?*); Sid. *šo?ē* 'ear of corn' (Dolgopolsky 1973, 120, with a different reconstruction). Cf. metathetic E.: Or. *ees* 'a k. of corn' (Sasse 1979, 44); Harso, Dob., Goll. *÷awš-* 'reifen' (Dull., 263).

Cf. differently in Militarev 1990, 79; 1995, 117–18; HSED, No. 559.

6. Afras. **ĉarVy-* 'barley'

Sem. (1) **ša÷Vr-* 'barley; grass, straw' (Dolgopolsky explains *÷-* as the result of contamination, after popular etymology, with Sem. **ša÷r-* 'hair', which is quite plausible): Ugr. *š÷rm* 'cebada' (DLU, 427); Hbr. *šə÷ōrā* 'the hairy, grainy kernel-fruit, barley' (HAL, 1346); Jud. *sə÷art* 'barley' (Ja., 1010); Syr. *sə÷ārat-* 'hordeum' (Brock., 489), Mnd. *sara* 'barley' (DM, 315); Arb. *ša÷ir-* 'orge' (BK 1, 1238); Sab. *s₂÷r* 'barley' (SD, 268); Gez. *šā÷r* 'herb, herbage, grass, vegetation, straw' (LGz., 525); Tgr. *sā÷ar* 'grass, hay' (LH, 194; *šə÷ir* 'barley', LH, 226 is likely an Arabism); Tna. *sa÷ri* 'erba, fieno' (Bassano 1918, 139), Amh. *sar* 'grass (either green or dried)' (Kane 1990, 482), *sororro* 'white *tef*' (Kane 1990, 486); Har. *sā?ar*, *sār* 'grass' (Leslau 1963, 136); Gur. **sa?ar* 'grass' (LGur., 530); Mhr. *šēr* 'straw' (JM, 370); Jib. *šā÷ar* 'dry grass, straw' (JJ, 244). Cf. Mhr. *šə÷ir* JM, 391; Jib. *ši÷ir* JJ, 259 'barley'; Soq. *šā÷ir* 'orge' (LS, 420), very likely Arabisms.

Sem. (2): Eth. **šar(-n)ay-* 'wheat' (borrowing from Cu. cannot be ruled out): Gez. *šərnāy*, Tgr. *šərnay*, *šərnay*; Tna. *sərnay*; Amh. *sənde*; Gaf. *səndā*; Arg.

sərray; Gur. *səre 'wheat', Har. sərrī 'thick bread made of wheat' (LGz., 534).

Ch. W.: Tng. *sîr-* 'yam' (*s-* in Tng continues several Afrasian sibilants, incl. *ç); C.: Bnn. *şordà* 'okra' (Kraft) <*çVr-d- <*çVr-t- (cf. *kowàrà* 'son, daughter' ~ *kòwàyendà* 'sister', or *çindà* 'mahogany' <*tiʔn-t-, cf. No. 14 below, and Stolbova 1996, 136).

Eg.: *şr.t* 'Gerste' MK (EG IV, 524).

Cu. *ʔaçar- (with *ʔa- prefixed): N.: Beja *eşerri* 'Mais' (Reinisch 1895, 33; cf. also *aşratta* 'eine lange Grasart' Reinisch 1895, 33); E.: Kmb. *aşārú-ta*, Tmb. *aşaru* 'barley' (Leslau 1959, 18). Cf. *SVr- 'wheat': N.: Beja *serám* 'Weizen' (Reinisch 1895, 205); E.: Som. *saren* 'wheat' (Abraham 1962, 218); Or. *şuroo*, *şiroo* 'k. of pap made out of well-ground peas' (Gragg 1982, 370); Had. *sara-ta* 'sorghum' (Huds., 139); Harso *soro* 'Weizen' (Dull., 279). Cf. also N.: Beja *şinrây* 'Weizen' (Reinisch 1895, 217); E.: Af. *sirrây*; Sa. *şinrâ*; C.: Bil. *şinrây* id. (Reinisch 1886, 904), probably borrowed from or to Eth.

Om. N.: Mç. *aşáro* '(roasted) barley' (Leslau 1959, 18; a loan from E. Cu.?).

Cf. Militarev 1990, 79; HSED, No. 544: Sem. *şa+ā/ir-; Eg. *şr*.

7. Afras. *da/ing^w- ~ *(ʔa-)da(n)g^wVr- ~ *(ʔa-)dang^wal- 'beans, leguminous plants; corn'

7.1. *da/ing^w- 'k. of beans; corn'

Sem. *dVng^w- 'beans' ~ *dagan- 'corn, grain' (metathetic or <*da(n)g-an-); Soq. *dengo* 'haricots' (LS, 130); (?) Tgr. *baldānga*, *bārdunga* 'bean; *Vicia faba* Sill.' (LH, 273; <*bal/r-dung-, with an obscure first element; probably from Bil. or Sa.; cf. also Tna *baldānun* 'Bohne' LH, 273); Ugr. *dgn* 'grano, trigo' (DLU, 130); Ph. *dgn*; Hbr. *dāgān*; Arm. Eg. *dgn* 'corn, grain' (HAL, 214).

Brb. *digi(n): E. Wlm. *ta-dəgin-it* '*Bauhinia rufescens* (gousses noires)' (Nicolas 1957, 37); Zng. *ti-digi-d* 'caroube, haricot' (Nicolas 1953, 265). Cf. Ayr *te-dāngwāw-t* 'grenier de céréales' (Alojaly 1980, 24).

Ch. *da/ingw-: W.: Hs *dangwa-mi* 'a gruel made with the mealy pulp found inside locust-bean pods' (Bargery 1934, 219), Ang. *tang* 'corn' (HSED, No. 620; <*dang-); E.: Nan. *tinge* 'bean' (<*ding-; cf. Jung

CLR, I, XXIII Sound correspondence table).

Eg.: *dđw* 'kind of grain' OK (Faulkner 1962, 314; cf. EG V, 502) <*dVg(V)w.

(?) Cu. *bal/r-dang^w- (the meaning of the first element of this composed word is not clear): C.: Bil. *baldanguā* 'Bohne, *Faba*' (Reinisch 1887, 78); E.: Sa. *bardangā*, *baldangā* 'eine bestimmte Bohnengattung' (Reinisch 1890, 86).

7.2. *(ʔa-)da(n)g^wVr- 'k. of beans'

Sem. *dVgVr- 'beans': Syr. *dagrā*; Arb. *dažr-*, *dužr-*, *dužur-*; Mhr. *dēžir*; Jib. *dəgərāt*, pl. *dugur*, Soq. *dīgir* 'fèves' (Cohen *et al.* 1970–, 222). Cf. Tgr. *ʔadung^wəra*, Tna. *ʔadang^wəra*; Amh. *adāng^ware*; Gaf. *adāng^warā*; S. Arg. *adongure*; Gur. *adāng^warre* id. (Cohen *et al.* 1970–, 222), obviously Cushitisms.

Ch. E.: Sok. *dagir* 'millet' (HSED, No. 621).

Cu. *ʔa-da(n)gwVr-: C.: Bil. Khmr. *adogur*, Damot, Aw. *adangwari* 'bean' (LGur., 17; Reinisch 1887, 15); E.: Som. *digir* 'fagioli' (Agostini *et al.* 1985, 186); Or. *adanguar* 'Bohne' (Reinisch 1887, 15; cf. also *otongora* 'beans' Gragg 1982, 307); Sa. *adagur* 'Bohnen' (Reinisch 1890, 11).

7.3. *(ʔa-)dang^wal- 'corn; beans'

Sem. (ʔa-)dang^wal- ~ *dalg^w-am-: Tgr. *ʔādāngāl* 'bean(s)' (LH, 384; <Bil.? Cf., however, *ʔādāggāla*, *dāggāla* poet.; Tna. *dāggāla* 'a sort of corn growing wild; *Eleusine aegyptiaca*' LH, 385); Har. *dāngulle* 'pea' (Leslau 1963, 57; <Or.); Gez. *dālg^wəmmā* 'porridge'; Amh. *dālg^wām* 'a variety of sorghum' (LGz., 131).

Ch. *(ʔV-)da(n)gwVI-: W.: Krkr. *dşgwə̀li* 'gruel' (Kraft); C.: Mada *édīngèl* 'tige de mil (dont on a coupé l'épi)' (Barreteau & Brunet 2000, 93); E.: Mig. *dāgàlāwé* 'noix de palmier doum' (Jungraithmayr & Adams 1992, 76; metathetic <*dagwal-).

Cu. *(ʔa-)dang^wal-: C.: Bil. *adāng^wal* 'Bohne' (Reinisch 1987, 15; LGur., 17; cf. *adagalā* 'eine essbare Pflanzensorte' Reinisch 1987, 13); E.: Or. *dāngulle* 'bean' (LGur., 17).

Cf. Militarev 1990, 79; HSED, Nos. 620, 621, 653.

8. Afras. *g^wi/ar- ~ *garga/ir- 'grain; bean' (related to No. 20?)

Sem.: Hbr. *gērā* ‘carob seed’ (HAL, 200); pB. *gargēr* ‘berry, grain’ (Ja., 265); Jud. *gargēr*-id. (Ja., 265); Arb. *žaržar-*, *žiržir-* ‘fève’ (BK 1, 275).

Brb.: Hgr. *a-ḡḡar* ‘gousse rempli de graines pas comestible (servent à tanner les peaux)’ (Foucauld 1951–52, 478); Ayr, E.Wlm. *a-ggar* ‘fruit de *təggart*; tan’ (Alojaly 1980, 57); Qbl. *ta-ž^wrir-t?* ‘papillonacée à petites gousses comestibles’ (Dallet 1982, 271).

Ch. **(?a-)g^w/ir-* ~ **gargar-*: W.: Hs. *guro* ‘okra’, *gērō* ‘bulrush millet’ (Abraham 1965, 346, 315); Sura *gyewuro*; Dera *gerò*; Seya *gyoro* ‘millet’; Ang. *gürm* ‘bean’ (<**g^wir-m-*?); C.: Mndr. *gíre* Glv. *?agùrà*; Zgw. *ḡgurè*; Gava *ḡgurè*; Nkts. *ngüre* ‘bean’ (<**?a-g^wVr-*?); Misme (Zime) *guirany* ‘guinea-corn’ (<**g^wir-an-*?); Higi (Futu) *gèrwá* (all Kraft); Mtkm. *gagar* ‘millet’ (Kraft; <**gargar-*); Mada *aḡgar* ‘niébé cultivé, haricot’ (Barreteau & Brunet 2000, 220; <**?an-gar-*), *ḡgàrḡgàr* ‘*Indigofera hirsuta* (Fabaceae)’ (Barreteau & Brunet 2000, 221; <**?agar?agar-*?); Log. *mááḡurée* ‘beans’ (Jung. CLR, II, 11; <**ma-g^wVr-*?); E.: Smr. *giri*, *žiri*; Jegu *giri*, *gír(k)* ‘bean’ (HSED, No. 933; Jung. CLR, II, 11); Mig. *gàgàrré* ‘mil (à demi écrasé et mouillé)’ (Jungraithmayr & Adam 1992, 86; <**gargar-*).

Cu. E.: Or. *garii* ‘seed’ (Gragg 1982, 169); Had. *žar-etta* id. (Huds., 130; ž <**g?*).

Cf. HSED, No. 933: Hbr., part of Ch.

9. Afras. **ḡVnt-* ‘kind of cereal’

Sem.: Akk. *uṭṭatu* ‘Getreide, Gerste, Korn’ Oakk. on (AHw, 1446); Ugr. *ḡṭṭ*; Hbr. *ḡiṭṭā*; Jud. *ḡiṭṭət-*; Syr. *ḡeṭṭət-*; Arb. *ḡiṭṭat-*; Soq. *ḡiṭṭāh* ‘wheat’ (HAL, 307); Jib. *ḡiṭ* ‘food; beans; any cereal’ (JJ, 119).

Ch. W.: Hs. *ḡuṇḡu* ‘k. of short-headed bulrush-millet’ (Bargery 1934, 408; <**ḡuṇṭ-*); (?) Tng. *kwonḡò* ‘ground nut’; Gera *handimì* ‘beans’ (Kraft; sound correspondences not clear); Glmb. *āṇḡi* id. (Stolbova 1987, 60; <**ḡant-*?).

Cu. E.: Som. *ḡaḡuḡ* ‘corn, millet, sorghum’ (Abraham 1962, 102), *ḡadud* ‘corn, sorghum’ (Dolgopolsky 1973, 222, quoted in Reinisch); Sid. *ḡayṭe* ‘barley’ (Huds., 24). Cf. Brj. *ḡaṭ-*; Kmb. *ḡaṭiid-* ‘to cut crops, reap’ (<**ḡaṭ-* Huds., 46; may originate from **ḡaṭ-*).

10. Afras. **kabb-* ~ **kib-t-* ~ **kaHb-/*kabH-* ‘kind of corn (wheat?)’

Sem.: Akk. *kibtu* ‘wheat’ Oakk. on (CAD k, 340; AHw, 472 = Sum. GIG(BA), but hardly a Sumerism); Tgr. *kābbā* ‘Getreidebrei’ (LH, 411).

Brb.: Hgr. *a-kəbbu* ‘noyau (de fruit)’ (Foucauld 1951–52, 728); Ayr, E. Wlm. *ekābb* id. (Alojali 1980, 87), *te-kəbbəkəb-t* (redupl.) ‘épi de certaines plantes (blé etc.)’ (Alojali 1980, 88); Tait. *a-kəbbu* ‘noyau (de datte)’; Qbl. *a-kubab* ‘épi de sorgho’ (Laoust 1920, 475).

Ch. W. **kabH-/*kaHb-*: Hs. *kuḡewa* ‘okra’, *kaḡu* ‘Fura made of guinea-corn’ (Bargery 1934, 625, 515). Cf. Gwn. *kōbo*; Glmb. *kāb*; Pero *kāppu*; Bole *kapp* (*-pp* <**-bb*) ‘to plant, sow’; Tng. *kaḡe* ‘to sow’ (Jungraithmayr 1992, 93).

Cu. E.: Gel. *kabbo* ‘unleavened bread’ (Huds., 31), Konso *kapp-a*, Gid. *kapp(-o)* ‘wheat’ (PEC, 57; *-pp* <**-bb* — see PEC, 55; acc. to Sasse, from **gəzb-* PEC, 57, which is less likely), Dob. *kapoča* ‘Gerste’ (Dull., 244; <**kab-Vt-*).

Om. S.: Dime, Ari *kəbb* ‘maize, corn’ (Bender 1994, 154).

11. Afras. **lay/w-* ~ **?/VI(l)-* ~ **w/Vlal-* ‘k. of corn (millet?)’

Sem.: Akk. *lillānu* (*lilliannu*, *lālānu*) ‘grain at its highest growth’ SB (CAD I, 188; AHw, 553; <**laylay-an-*, reduplicated, with *-an* suffixed?).

Brb. **y/HVI(V)l-*: Ghdm. *ileli* ‘millet’; Ntf. *ill-an* (pl.); Zng *ill-en* (pl.) ‘sorgho’ (Laoust 1920, 268).

Ch. **?i/ulaw-* ~ **wVyal-*: W.: Dera *yila* ‘nut, grain’ (Skinner 1996, 246); C.: Peve *lo*; Gude *?əla?in* ‘okra’ (Kraft); E.: Mubi *wèyál* ‘seed’ (Jung. CLR, II 287); Mok. *?ulo* ‘grain’ (Skinner 1996, 117). Cf. Bid., Dgl. *luw-* ‘sémer’ (Skinner 1996, 246); Mig. *lúwáw* id. (Jungraithmayr & Adams 1992, 104).

Cu. N.: Beja *óli* ‘geröstetes Getreide’ (Reinisch 1895, 14), *óli* ‘Brei’ (Reinisch 1895, 15); E.: Saho, Afar *iláú* ‘Korn, Getreide, spec. Durra’ (Reinisch 1886, 808); Brj. *álo* ‘millet’ (Sass. Bur., 25); Harso *álólo* ‘*Phaseolus vulgaris*’ (Dull., 235), *wolalla* ‘Sorghum’ (Dull., 269).

Om. N.: Koyra *allo* ‘millet’ (Sass. Bur., 25, quoted in Hayward); S.: Ari *uula*, Hamer *ulla* ‘maize, corn’ (Bende 1994, 154). Cf. Kačama *ayl-* ‘to sow’ (Lamb. Wol., 308).

12. Afras. *sVny/?- ‘seed, corn; standing crops’

Sem.: Akk. *ašnan* (*asnan*) ‘grain, cereal (as a generic term)’ (CAD a2, 450), *ašnanu* (AHw, 82) OB on (<*? *a-šnan-*, with prefixed ?*a-*); (?) Chaha *sənā*, Eža, Ms. *sənne*, Gyeto *səṇay*, *səne?ā*, End. *səne?*, Enn. *səne?ā* ‘wheat’ (LGur., 558–9; acc. to LGur, 555, represents *səre* with *rn*, which cannot explain -? in part of the forms; cf. Har. *sāni*, Sel. *sāne*, Wol. *sāñne*, Zw. *sāni* ‘seed, crop’ LGur., 555, very likely from Cu.); Mhr. *mə-hnoy* ‘farm near a town’ (JM, 159); Jib. *mə-šnu* ‘garden on the mountain for *dhura* or beans’, *ešné* ‘to have a garden, field’ (JJ, 263); Soq. *šāne* ‘semence, blé qui est sur les tiges’, *héne* ‘semer’ (LS, 145). Cf. Har. *sāni*; Sel. *sāne*; Wol. *sāñne*; Zw. *sāñ* ‘seed, crop’ (LGur., 555; very likely from Cu.).

Ch. (1) W. *sVn?-. Ang. *šôṅ* ‘millet’ (Kraft); Tng. *siṅa* ‘sp. of bread’ (Jungraithmayr 1991, 145); C. (redupl.): Daba *sèsin*; Kola *sísin* ‘seed’ (Jung. CLR, II, 287).

Ch. (2): W.: Wrj. *sənāna*, Tsagu *šinàn*, Kariya *sín*, Pa. *sinna*, Siri *šināwi*, Mburku *šiná*, Jmb. *sùná*; C.: Masa *síne*, Zime-Batna *sínē* ‘fields (farm)’ (Jung. CLR II, 134–5); Lame *šinì*, Peve *šine*, Bnn. *senina* (Stolbova 1996, 39 and HSED, No. 2249 compare these forms to Ch. E. **sinya-* ‘earth, sand’ and Eg. *syn* ‘clay’ reconstructing Ch. **sina* ‘field, earth’ Stolbova 1996, 39, and Afras. **sin-* ‘earth, clay’ HSED, No. 2249).

Eg.: *sn.w* ‘Opferbrote’ MK (EG IV, 155).

Cu. E.: Som. *šuni* (LGur., 555), Or. *sāñne*; Gel. *sanne*; Brj. *sāñnee* (Huds., 130); Dar. *sanne* (LGur., 555) ‘seed’.

Om. S.: Hamer *isin* ‘Sorghum’ (Bender 1994, 148; <*?V-*sin?*).

13. Afras. *šV(m)bar- ‘k. of corn; chickpea’

Sem.: *š_x *abr(-Vm)*- (on Afras. *š- > Sem. *š_x - > Hbr š ~ Arb. š- see Militarev & Kogan 2000, xcvi–cv): Hbr. *šābār* ‘grain’; Sam. *šabru*, *šabrimma* id. (HAL, 1405–6); Arb. *šubrum-* ‘espèce de plante dont la graine ressemble aux lentilles’ (BK 1, 1184; metathetic of *š_xVmbVr- or < *š_xVbr-, with -Vm suffixed); (?) Tgr. *sābbāra* ‘*Lathyrus sativus*’ (LH, 183; with a meaning shift?). Cf. Tna. *šəmbəra*; Amh., Arg., Har. *šumbura*; Gur *šəmbura* ‘chickpea’ (LGur., 579; likely Cushitisms, though borrowing into Cush. cannot be completely ruled out).

(?) Brb. (with a meaning shift?): Hgr. *é-səbər* ‘natte

d’afezu’ (Foucauld 1951–52, 1803; *a-fəzu* means ‘*panicum turgidum*’, a k. of millet: Foucauld 1951–52, 374); Ayr. E.Wlm. *e-sābār* ‘natte, tapis *d’afazo*’ (Alojaly 1980, 169).

Ch. *š_x*abar-* ‘kind of corn’: W.: Hs. *zábráá* ‘millet’; C.: Mndr. *žébèrè*, *žəbùrè* ‘*ocra*’ (Stolbova 1996, 51); (?) Masa *žòdòrə*; Lame (Peve) *žòr*, Heḍe, Zime *žor* id. (Stolbova 2001; <*š_xVmbVr-?).

Cu. C.: Aw. *šəmbər-i* ‘chickpea’ (LGur., 579); Bil. *sabbar-ā* ‘Hülsenfrucht’ (Reinisch 1887, 294); E.: Sa., Af. *sabbar-ē* ‘eine bestimmte Hülsenfrucht’ (Reinisch 1886, 895), Or. *šumbur-ā*; Gel., Kmb. *šumbur-a*; Brj., Had., Sid. *šimbur-a* ‘chickpea’ (Huds., 39); Goll. *šumbur-o* ‘Erbse’ (Dull., 239).

14. Afras. *ti?(i)n- ‘fig-tree’ (<*ti?n-? Cf. Akk. *ti?u* and Janj. *te?ā*)

Sem. **ti?in-*: Akk. *tittu*, *ti?ittu*, pl. *tinātu* ‘Feige(nbaum)’ Lex., *ti?u* ‘Feige’ SB (AHw, 1363); Hbr. *tə?ēnā* ‘fig, *ficus Carica*’ (HAL, 1675); Jud. *tēnət-*, Syr. *te?ətt*, pl. *tē?nē* id. (HAL, 1675); Mnd. *tina* ‘fig-tree’ (DM, 486); Arb. *tīn-* (coll.) ‘figue’, *tīnu-l-?afrañži* ‘espèce de cactus’ (BK 1, 213); Har. *tīn*, *tīni* ‘fruit of cactus’ (acc. to Leslau 1963, 150, from Arb. *tīn* ‘fig’ of Aramaic origin; otherwise from Cu.).

Brb. **tiHVyn-*: Hgr. *təyne*; Ayr. *tayni*, *təyni*, *tini*, *tinəy*; Nslm. *teḥəyne*; Sml. *tiyni* (Prasse 1969, 91); Zng. *təynih* (Nicolas 1953, 142) ‘datte’.

Ch. **ti?un-/ti?an-* ‘mahogany, fig tree’ (Stolbova 1996, 136): W.: Ang. *teung* ‘tree, fig tree’, Sura *tiṅ* ‘tree’; Gera *tyèniá*; Bol. *tàní*; Kirfi *tán*; Ngm. *tàni*; C.: Boka *tīn-da*; Gab. *tiyìn-da*; Gaa *tīn-da*; Peve *mə-čin*, Bnn. *čin-dà* ‘mahogany’; Masa *čin-da* ‘mahogany; tamarind’ (Kraft).

Cu. E.: Som. *tin*; Or. *tīni* ‘fruit of cactus’ (Leslau 1963, 150; possibly from Arb.).

Om. N.: Janj. *te?ā* ‘sicomoro’ (Cerulli 1938, 85).

B. Cultivation of land**15. Afras. *?ry/w ~ *?yr- *?rr ~ *r?/w ‘to gather, reap, cultivate’ (related to No. 1?)**

Sem.: Akk. *arû* ‘to cut branches (of a date palm)’ SB (CAD a2, 317; cf. also *arû* ‘granary, storehouse’ OAss. ? CAD a2, 313; AHw, 72); Hbr. *ryr* ‘to pluck’, pB. ‘to

gather figs' (HAL, 82); Ph. *?ry* 'to gather' (Tomback 1978, 30); Gez. *?arara* 'to reap, gather, harvest' (LGz., 39), *?araya*; Tgr. *?ära*, Tna. *?aräyä* 'to gather, glean' (LGz., 40); Amh. *arrärä* 'to reap, mow' (LGz., 39).

Ch. **?irw- ~ *ra?- ~ *rawraw-*: W.: Hs. *ror-* 'to gather, glean, harvest' (Skinner 1996, 220; redupl.); Ang. *er* 'to hoe'; Dwot *?ir* 'hoe' (Skinner 1996, 109); Ngz. *ruw* 'to cultivate, hoe, weed'; C.: Gude *ra* 'field, farm, plot' (Skinner 1996, 209); Lame *ra?a* 'ramasser' (Skinner 1996, 220); E.: Dgl. *röre* 'faire le dernier sarclage' (Skinner 1996; redupl.); Kera *erwi* 'sarcler' (Skinner 1996, 109).

Cu. C.: Aw. Bil. *ar* 'to gather, glean' (LGz., 40; possibly from Eth.); Khmr. *ayer* 'mähen, schneiden (Gras, Korn)' (Reinisch 1884, 345); E.: Sa. *arar* 'to glean' (LGz., 39); Af. *arar* 'sammeln, ernten' (Reinisch 1886, 816; two latter forms probably from Eth.); Som. *ururi*; Rnd. *ur'uuri*, Boni *eruuri* 'to gather, collect' (Heine 1978, 75; <?*Vruri, hardly from Eth. in view of the difference in vocalism); Sid. *roa*, *ro?ira* (redupl.) 'to pluck vegetables' (Skinner 1996, 220), Dob.; Gorrose *ayre* 'Erntefest' (Dull., 239).

16. Afras. **by/wr ~ *?br* 'to cultivate, hoe', **bay/wr* 'hoe; land (designed) for cultivation' (any connection with No. 2?)

Sem.: Akk. *aburru* 'rear, back (of a house or field); field or pasture by the city wall' OB on (CAD *a1*, 90; 'Flüsswiese' in AHw, 9; <?*aburr-, with prefixed ?-); Hbr. pB. *būr* 'to be empty, waste, uncultivated' (Ja. 148); Syr. *būr* 'terra inculca' (Brock., 63); Arb. *bawr* 'terrain qui n'est pas encore propre à être ensemencé?; jachère' (BK 1, 177). Cf. Gez. *ma-bāro* 'means of digging (hoe, spade)'; Tna. *barāwä* 'to dig', *mā-baro* 'hoe' (LGz., 330).

Ch. W.: Bol. *bóóró* 'to plough' (Takács 2001, 27); C.: Mada *óbbòr* 'biner avant de semer' (Barreteau & Brunet 2000, 70; <?*VbVr); E.: Mig. *bârçè* 'jachère' (Jungrathmayer & Adams 1992, 69; <?*bar-t-); Bid. *beret* 'sarcler, biner' (Takács 2001, 26).

Eg. *b*: 'hacken' OK (EG I, 415); <?*bVr?

Cu. C.: Khmr. *baruw* 'auflockern die Erde mit einem Karst' (Reinisch 1884, 350; metathetic <?*bwr); E.: Som. *beer* 'campo coltivato; giardino; orto; seminare, piantare' (Agostini *et al.* 1985, 53), *abuurr-*; Alaba *abuurr-*, Had. *abuull-* (-ll <?*rr) 'to cultivate', Bayso *abar-* 'to plant' (Lamb. Wol., 313); Brj. *bóyr-a* 'two-

handed hoe'; Kon. *payr-aa* 'two-tipped digging stick'; Gid. *pawr-a* 'two-bladed digging stick'; Dob. *payr-e* 'two-pronged hoe' (Sas. Bur., 41; *p-* <?*b-); S.: Alg. *burabura* (redupl.) 'cultivated ground' (Ehret 1987, no. 387). Cf. Dah. *bur-* 'to cut grass, mow' (Ehret 1980, 138).

17. Afras. **çdd ~ *çd?/*ç?d* 'to hoe (border-furrows); measure/survey/apportion field-plots', **çadw/y-* 'a (measured) plot of open country, cultivated land'

Sem. (1) **šady-* 'a (measured) plot of open country, cultivated land': Akk. *šadû* 'open country, steppeland' OAKk. on (CAD *š1*, 49; AHw, 1124–5; the omonymous *šadû* 'mountain, mountain region' CAD *š1*, 49, is to be compared to Ugr. *šd* 'monte' DLU, 431, and Arb. *sadd-* 'montagne' BK 1, 1068, to reconstruct a different Sem. root **šadd/w-* 'mountain' < Afras. **sad-*), *šiddu* '(long) side of a piece of immovable property; a measure of length or area (incl. a road)' OAKk. on, 'real estate grants and sales' MB on (CAD *š2*, 403–5; AHw, 1230); Ugr. *šd* 'una franja, un largo de terreno, bancal; yugada/acre; campo abierto, campiña; campo, terreno, parcela, finca, explotación agrícola; estepa' (DLU, 431, 433); Hbr. *šādā* 'pasture, open fields, land, acreage, arable land' (HAL, 1307–8); Ph. *šd* 'field, territory, cemetery, mainland' (Tomback 1978, 314), Amrn. *ša-te-e* 'field, plain' (HJ, 1110); Syr. *sadd-* 'sulcus; spatium sulci i.e. 400 ulnarum' (Brock., 460), Mnd. *sadia* 'field, open space, plain, desert' (DM, 310); Sab. *s₂dw* 'mountain or cultivated land?' (SD, 131; the correct meaning must be 'cultivated land', as the similar-looking Sem. root for 'mountain', **šadd/w-* adduced above has another sibilant in the *Anlaut* yielding Sab. *s₁*); Tgr. *səd* 'distance, frontier' (LH, 197), Amh. *sād(d)a* 'place having no fence, hedge or wall' (Kane 1990, 574).

Sem. (2) **šdd ~ *š?d* 'to hoe border-furrows; to measure a field, distribute plots': Akk. *šadādu* 'to measure, survey a field' OAKk. on (CAD *š1*, 27; AHw, 1121); Hbr. *šdd* (pi.) 'to harrow, plough border-furrows' (HAL, 1306); pB. *šad* 'furrow' (Ja., 1523); Jud. *sdd* (pa.) 'to plough' (HAL, 1306); Har. *se?ada* 'to distribute', *šiža* (-ž- <?*d-) 'part, share'; Gur. **sādā* 'to distribute, give a share' (LGur., 535).

Ch. W.: Wrj., Miya *šad-*; Pa. *šadu*; Siri *šada*; Kar. *šeyašedə* (redupl.) 'to hoe, cultivate' (Skinner 1977, 26; <?*çadaH- or **çadHad-*, see Stolbova 1987, 200); E.: Mok. *séçdđó* 'recolter, moissonner' (Mok., 123; <?*çVddVH- or **çVHVdd-*).

Eg.: *šdw* 'Grundstück; als Teil des *šh.t* Feldes' MK (EG IV, 568), *šdi* 'to apportion field-plots' MK (Foukner 1962, 273).

Cf. Militarev 1990, 75–6; differently in HSED, Nos. 522, 566.

18. Afras. *g^(w)a/in(y/H)- 'area, plot of land producing edible plants' (likely related to No. 19 *g^(w)ny/w/? 'to cultivate, till field; to crop')

Sem. **ga/inn-* 'garden': Ugr. *gn* 'jardin, huerto' (DLU, 148); Hbr. *gan* (HAL, 198), *gannā*, **ginnā* (HAL, 199) 'garden'; Emp. *gn* (Cohen *et al.* 1970–, 147), Jud. *gīnnət-*, *gīn-* (Ja., 240) id.; Syr. *gannət-* 'hortus' (Brock., 122); Mnd. *ginta* 'garden' (DM, 91); Arb. *žannat-* 'jardin' (BK 1, 333; considered a loan from Arm., see LGz., 199); Alg. dial. *žannat* 'campagne' (BK 1, 333); Sab. *gnt* 'garden, orchard' (SD, 50). Cf. Gez. *gannat* 'garden, Paradise' (considered a loan from Syr.-Arm., see LGz., 199); Tgr. *gānna*, *žānnāt*; Tna *žānnāt* 'paradise'; Amh. *gannat* 'garden, paradise'; Mhr *gānnēt*; Hrs. *gennēt*; Jib. *gént*; Soq. *gīnnəh* 'paradise' (Cohen *et al.* 1970–, 147; all loanwords).

Brb.-Can.: Sml. *ta-gän-t* 'forêt' (Destaing 1920, 132); Ferro *gan* 'el árbol santo' (Wölfel 1965, 448).

Ch. (1) **g^(w)an?*- 'field, farm': W.: Hs. *gōnā*; Tng. *kaŋ*; Fyer *hagón* (metathetic); Dff., Sha *goŋ*; E.: Mig. *gān*; Bid. *gaŋ* (Jung. CLR, II, 134–5; cf. HSED, no. 890, with a different reconstruction).

Ch. (2) **gwinay-* 'edible fruit': Hs. *guna* 'melon'; C. Gude *gunaya* 'tree sp. with edible fruit'; Mafa-Mada group **gwini* 'papaya' (Skinner 1996, 91).

Ch. (3) W. **gangin-* (redupl.) 'Deleb palm (*Borassus aethiopum*): Hs. *giginya*; Dera *gangiyo*; Bol. *ganga*; Glmb. *kanga* (Skinner 1996, 84).

19. Afras. *g^(w)ny/w/? 'to cultivate, till field; to crop' (likely related to No. 18)

Sem. **g^(w)ny/?* 'to gather, crop': Arb. *žny* 'cuellir des fruits', II 'abonder en produits qu'on cueille, qu'on récolte, comme plantes, céréales, etc.' (BK 1, 340), Dat≠ dial. *žanā* 'remove the honey from a beehive' (LGur., 318); Sab. *t-gn* 'to gather crop', *gny* 'crop' (SD, 50); Gez. *g^wan?a* 'to heap up' (LGz., 196); Ms. *žāññā* 'to remove the honey from a beehive' (LGur., 318).

Ch. W. **g(V)wan-*: Gwn. *gwana*; Fyer *ŋgon* 'to culti-

vate' (Skinner 1996, 88); C.: Nak. *magigànā*; Glv. *magyigànā* 'hoe' (redupl. stem with the instrumental prefix <**ma-gingan-* 'instrument for tilling field'; cf. Takács 1999, 44); Masa *guna* 'hoe, mattock' (Kraft); E. **gawn-*: Bid., Dgl. *gaw(a)n* (Skinner 1996, 88); Mig. *gáwnò*, Mubi *gàwán* 'to cultivate' (Jung. CLR, I 64).

Eg.: *ḍny.w* 'ein Gerät neben Hacken' CT (EG V, 575; Takács 1999, 44: <**gny*); cf. also *ḍnw* 'Tenne' NE (EG V, 575).

20. Afras. *g^war- or gu/ar- 'to collect, harvest' (related to No. 8?)

(?) Sem.: Gur. **g^wär* 'season of agricultural activities, harvest' (LGur., 287; acc. to Leslau, from a Cu. term meaning 'time' and 'opportune time').

Brb.: Ntf. *gru* 'glaner, cueillir, gualer' (Laoust 1920, 417); Qbl. (Zwawa) *ger* 'donner un fruit' (Laoust 1920, 258); **a/i-mgir* 'sickle' (with the instrumental *m-* prefix): Ntf. *imgir* (Destaing 1920, 124), Qbl. *a-mžər* (Dallet 1982, 490); Siwa *a-mžir* (Laoust 1932, 236); Ghdm. *a-mžir* (Lanfry 1973, 208); **mgr* 'to harvest' (a denominal verb derived from **a/i-mgir* 'sickle?'): Ntf. *mgər* (Destaing 1920, 189), Qbl. *əmžər* (Dallet 1982, 489); Siwa *mžər* (Laoust 1932, 261); Ghdms *əmžər* (Lanfry 1973, 208) 'moissonner'.

Ch. W.: Ang. *gur* 'to collect in great numbers'; Bol. *gar* 'to reap' (Kraft); Pero *gúurù* 'sickle' (Frajzyngier 1985, 32).

Cu. E.: Rnd. *gur-*; Boni *kur-* 'to pick fruit' (Sas. Bur., 86); Som. *gar-* 'to harvest'; Or. *guur-*; Kmb., Gid., Brj. *guur-* 'to pick up, gather' (Lamb. Wol., 435); Sid. *gur-* 'to pick coffee' (Huds., 69).

21. Afras. *(HV)g^(w)Vr- 'cultivated field; tilling, hoeing' (<*?V-g^war- related to No. 20 *g^war- or gu/ar- 'to collect, harvest', with *?V- prefixed, or < *hVgwVr- to compare to Eth. *garh-, with metathesis)

Sem.: Akk. *ugāru* 'Feldflur, Ackerland' Oakk. on (AHw, 1402; acc. to von Soden, from Sum., but more likely from Sem. *(?V-)g^(w)ar- or **hugar-*); Arb. *žawwār-* 'laboureur' (BK 1, 353; *nomen agentis* <**gwr*); Gez. *garha* 'to plough', *garāht*, *garh* 'field, arable land, farm. estate'; Tgr. *gārhat*; Tna. *gərat*, pl. *gərahəw* 'field' (LGz., 202).

(?) Brb. **HigVr* (otherwise from Lat. *ager*): Ntf. *igər*; Sghr. Mṭmṭ *ižər* 'champ de céréales'; Shw. *iğr*, *iyər*

‘terrain cultivé’ (Laoust 1920, 258); Qbl. *ižər* ‘champ labouré et ensemencé de céréales (orge, blé)’ (Dallet 1982, 270).

Ch. W.: Pero *gbúgrò* ‘to till the soil’ (Frajzyngier 1985, 31; <**gwVgr*- <**gwVrgVr*-?); C. **ḡgwurum*- ‘hoe’ with an instrumental suffix; cf. Stolbova 1996, 71, where these examples are combined with Hs. *kōrāmē* and C. Ch. forms in *k*-, *ḡ*- and *h*- to reconstruct **qoram*-): Higi (Gye) *ḡgwuru*, Fali (Kiria) *ḡḡwuru*-*mu*, Fali (Gili) *ḡḡur* ‘hoe’.

Cu. E.: Af. *gawra* ‘open space, fields, cultivated land’ (Parker & Hayward 1985, 111).

22. Afras. **ḡa/ull*- ? **ḡVw/yal*- ‘hoe; farming’

Sem.: Akk. *allu* ‘hoe’ OAKk. on (CAD *a1*, 356; AHw, 37; acc. to von Soden, from Sum. ^{al}AL, which is less likely); Sod. *wällāt* ‘forked digging stick’ (acc. to LGur., 653; acc. to Leslau, represents *wännāt* id. with alternance *l:n* unless from Cu.).

Brb.: Shilh (Ntf. and other dialects) *a-wallu*; Sened, Nfs. *uilli* ‘charrue’ (Laoust 1920, 277).

Ch. W.: Grnt. *uwal* ‘fields, farm’ (Jung. CLR, II, 134); C.: Fali (Jilbu) (*w*)*ole* ‘farm’ (Kraft).

Eg.: *ḡnn* ‘Hacke’ Pyr. (EG III, 114; -*nn* may originate from **-ll*).

Cu. E. **ḡayl*- ~ **ḡull*-: Sid. *heella-kko* ‘small digging stick’ (Huds., 50), Brj. *ḡayl-ee* ‘neighbourhood help, i.e. mutual help in agricultural work’ (Sas. Bur., 93–4), *ayliy-* ‘to sow’; Kon. *ayl-* ‘to sow (seeds) and plow them under’ (Sas. Bur., 29); Goll. *ḡullo* ‘Erntefest’ (Dull., 239).

Om. N.: Wol. *ayliy^a* ‘hoe’, Kač. *ayl-* (Lamb. Wol., 308); Koyra *ayl-* (Sas. Bur., 29 quoted in Hayward, p.c.) ‘to sow’.

23. Afras. **k^(w)ala[?]/w*- ‘forage, fodder; pasture; mowing, cutting grass’

Sem.: Akk. *ukullû* ‘Viehfutter; Verpflegung(sration), Verköstigung’ OB on (AHw, 1406; <**k^wVllā[?]*-?); Arb. *kl?* ‘abonder en fourrage (se dit d’un pays)’ (BK 2, 919), *kala[?]*- ‘fourrage (sec ou vert)’ (BK 2, 920); Gez. *k^wālawa* ‘to reap, mow’ (LGz., 284), *makala*, *makkola* (acc. to LGz., 339, for *makk^wala*; secondary derivation with *m*- prefixed) ‘to cut with a sickle, mow’;

Tgr. *māklay* ‘halm of durra, halm of corn’; Tna. *mākālā* ‘to mow, cut’ (LGz., 339); Amh. *kalkal* ‘pasture’ (Kane 1990; redupl.).

Brb. S. **klkl* (redupl. stem of intensive action): Hgr. *kelukelu* ‘ramasser hâtivement çà et là (des brins de pailles, des brindilles de bois)’ (Foucauld 1951–52, 800); Ayr. E. Wlm. *kəlankilet* ‘ramasser, reunir completamente’ (Alojaly 1980, 92; *t*-stem with a secondary -*n*-).

Ch. W.: Hs. **kāla* ‘gleaning, cutting grass’ (Abraham 1965, 459); Mpn. *čāl* ‘field, grassy area’ (Takács 1999, 68); Pero *kālā* ‘place for growing plants, farming land’, *kālù* ‘to gather’ (Frajzyngier 1985, 68, 35).

Cu. E.: Or. *kalō* ‘pasture, leaves and grass, grazing area; property’ (Gragg 1982, 244); Gel., Brj., Sid. *kalo*; Kmb. *kalu* ‘pasture’ (Huds., 111); (?) C.: Khmr. *kilkil* ‘Wiese, Trift’ (Reinisch 1884, 376; likely a loan of Amh. *kalkal*); Quara *kōla* ‘das Tiefland, die Niederung’ (Reinisch 1885, 83; unless a semantic shift from **kal(a?)*- ‘earth, land’); Sem.: Arb. *kl?* II ‘atterrir, approcher de la terre (un navire)’, *kallā[?]*- ‘rivage’ (BK 2, 919–20); Brb.: Qbl. *a-kal* ‘terre; sol; bien, propriété foncière (terrain cultivable)’ (Dallet 1982, 401); Ntf. *a-kal* ‘terre, sol, terrain’, etc. (Laoust 1920, 359); Ch. W.: Tng. *kālau* ‘soil, earth, ground’; E.: Tum. *kəlè* ‘earth’ (Takács 1999, 68).

Cf. differently Takács 1999, 68.

24. Afras. *(*ḡa*-*ḡ^wal*- or **ḡa*-*ḡawal*- ‘k. of hoe, a hammer/axe-like tool, a pick-axe’

Sem.: Akk. *akkullu* (or *aqqullu*) ‘a hammer-like tool, tool for field work’ OAKk. on (CAD *a1*, 276), ‘Dechsel, Picke’ Bab., NAss. (acc. to AHw, 30, from Sum. ^{ḡis}NIN-GUL; rather <**ḡa-kull*-, with a secondary reduplication of -*k*-), *kullu* ‘hoe’ Lex. (CAD *k*, 508; not in AHw); Syr. *ḡakl*- ‘malleus’ (Brock., 17); Arb. *ḡaklat*- ‘marteau, mailloche?’ (Blachère *et al.* 1964, 166); S. Arg., Har. *kalka* ‘axe’ (according to Leslau 1997, 208, from Cu. E. *kalta* ‘with an occasional alternance *k:t*’; rather redupl. <**kalkal*; Sel. *kālta*; Wln. *kältä*; Zw. *halta* ‘small axe’ must be Cushitisms - see Cu. below and LGur., 342).

Ch. **kawal*-: W.: Hs. *kāālāi* ‘a worn-out long-handled hoe’ (considered a Kanuri loan-word, which is unlikely in view of other Ch. and Afras. data; cf. also *kalme* ‘k of small hoe’ Abraham 1962, 462; **kal-mi*); Krkr. *kālā* ‘hoe’ (from Hs.?) ; Gera *kwalli*; Jimi *kwalō*;

C.: Wmd. *kùl*; Hil. *kwùlū* id. (Stolbova 1996, 60).

(?) Eg.: *iknw* 'Hacke' MK (EG I, 140); *-n- <*-l-?* (In Takács 1999, 216, *-n-* is otherwise interpreted as **-n-* and compared to Ch. W.: Ang. *čĕn*; Sura *čāan*; Mupun *čāan*; Jmb. *kəyanga* 'hoe'; reconstructed as Afras. **ky-n*).

Cu. **k^wal-*: N.: Beja *kūāla-ni* 'Axt, Beil, Haue', *kūālay* 'Stock, Stab', *kūl-* 'hämmern, hauen' (Reinisch 1895, 142, 139); E. **kal-t-*: Brj. *kālt-e* 'shaft (of plough); small axe' (Sas. Bur., 113), 'plough' (Huds., 114); Or., Qbn., Kmb. *kalta* 'small axe' (LGur., 342); Kon. *ḥali-tta* 'crutch, stick'; Baiso *kal-te* 'axe' (Lamb. Wol., 411); Dob. *takale* 'Grabstock ohne Klinge' (Dull., 245; *<*ta-kale* or **t-akale <*ta-?akal-*, with prefixed *t-?*).

Om. N.: Wol., Kačama *kaal-ta* 'axe', Dawro; Gamu *kal-ta* id.; Dače, Zaisse, Koyra *kallo* 'stick, club' (Lamb. Wol., 411).

25. Afras. **kwr* (Ch., Cu.) ~ **?kr* (Sem.) 'to cultivate', **?a/ikkār-* 'laborer' (Sem, Eg.) ~ **kiry-* ~ **kVw/?Vr-* 'garden, cultivated field' (Akk., Ch. W., Eg.)

Sem. (1): Akk. *ikkaru, inkaru* (Nuzi) 'plowman, farm laborer; farmer, small farmer; plow animal (Nuzi)' OAKk on (CAD *i*, 49; AHw, 368; acc. to both sources, from Sum *engar*, which is hardly so in view of the comparative data); Hbr. *?ikkār* 'agricultural worker without land' (HAL, 47); Syr. *?akkār-* 'agricola', *?kr* 'arravit, agrum coluit' (Brock., 20); Mnd. *AKR* 'to plow, dig, cultivate' (DM, 18), *±kara* 'peasant, husbandman, tiller of soil' (DM, 349); Arb. *?akr-* 'action de creuser la terre, une fosse; action de laborer la terre', *?akkār-* 'qui creuse la terre, fossoyeur; laboureur' (BK 1, 42), *?kr* 'labourer (le sol), le creuser' (Belot 1929, 11); Amh. *akkārā* 'to renew the land by plowing and sowing' (LGur, 593); Chaha *t-akārā*; Enn., Gyeto *t-ākārā*; End. *t-ākārā* 'to build a house and cultivate the field around it for the first time' (LGur, 595). (The Hbr. and Arm. forms and, probably, Arb. *?akkār-* may eventually be Akk. loanwords, in which case the Mnd. and Arb. verbs should be analyzed as an exceptional instance of an 'artificial' reverse primary verb derivation from an agent noun **?i/akkār-* derived, in its turn, from Sem. **?kr* 'to cultivate, plough' preserved in Amh. and Gur.)

Sem. (2): Akk. *kirū* (*kiriū*) 'garden, orchard, palm grove' OAKk on (CAD *k*, 411; AHw, 485; acc. to von Soden, from Sum.).

Ch. (1) W. **kVwVr-* ~ **kuHVr-* 'farm, fields': Bol. *koori*, Ngm. *kòrì* (Kraft); Tng. *korok* (Jungraithmayr 1992, 102; redupl. *<*kVrkVr-*); Pero *kuurì* (Frajzyngier 1985, 68); Krf. *kuru* 'fields, farm' (Jung. CLR, II, 134).

Ch. (2) C. **kwr* ~ **krw* 'to hoe': Mofu *kərw*; Lame *kura* 'to hoe, prepare field for sowing' (HSED, No. 26).

Ch. (3) **kawira(-mi)-* 'hoe' (*-mi* is an instrumental suffix): W.: Hs. *kórāmē* 'long-handled hoe' (Stolbova 1996, 71; reconstructed as **qoram-*, see No. 21 above); Ngz. *kùrəm*; C.: Hona *kūra*; Lame *kārua*; Bnn. *kàwirà* (Kraft); Fali (Bwagira) *ta-kurmi-n* 'hoe' (in Stolbova 1996, 71 reconstructed as **qoram-*).

Ch. (4) W. **kwr* 'to reap': Bol. *kur* 'to reap'; Tng. *korot* 'the clearing of fields' (Jungraithmayr 1991, 102); Pero *káwrò* 'to glean' (Frajzyngier 1985, 35); Ron **karat* 'to harvest' (Skinner 1996, 133).

Ch. (5) W. **kVwir-* 'sickle': Tng. *kwirì*; Brm. *kòr* (Kraft); C.: Mofu-Gudur *kərw* 'couper l'herbe avec une faucille pour préparer un nouveau champ'.

Eg. (1): *:kr* 'earth-god *Aker*' (determined with the ideogram 'patch of land') Pyr. (EG I, 22). Originally 'The Labourer'?

Eg. (2): *k:ry* 'Guartner' late MK (EG V, 108).

Cu. S.: **kur-* 'to cultivate': Ir. Al. *kurumo* 'hoe'; Asa *kurim-*; Ma?a *-kuru* 'to cultivate' (Ehret 1980, 247).

Cf. Militarev 1990, 75; differently in HSED, Nos. 26, 70, 1483 and Takács 1999, 68.

26. Afras. **ladd-* ~ **lV?Vd-* 'plot of land (of a specific status)'

Sem.: Akk. *ludû*, an administrative designation of a field (probably a field, on which specific work obligations have to be performed) OB on (CAD *l*, 1238); 'eine Art Saatfeld' (AHw, 561; *<*lVdw/y-*); Arb. *ladidat-* 'jardin couvert de verdure et de fleurs' (BK 2, 982; with a meaning shift?).

Ch. E.: Jegu *lóód* 'field' (Jung. 125; *<*laHad-*).

Eg. *i:d.t* 'Art Feld' MK (EG I, 35), 'tract of land' (Foukner 1962, 10), *i:dw.t* 'Viehweiden' 19 Din. (EG I, 35) *<*l?d?*

Cu. E.: Or. *laddaa* 'one person's area, property' (Gragg

1982, 259).

Cf. HSED, No. 1633: Jegu; Eg.; Or.

27. Afras. *mVrr- 'hoe'; *mrr, *my/?r 'to hoe, farm'

Sem.: Akk. *marru* 'spade, shovel' OB on (CAD *m*, 287; AHw, 612; acc. to both sources, from Sum. *MAR*; the Akk. term is commonly thought to be a loan in Syr. and Arb.; however, the obviously related, not borrowed, Amh. and Gur. as well as other Afras. forms confirm a Semitic and, eventually, Afrasian origin of the Akk. *marru* therefore to be regarded as a source for the Sum. *MAR*), *mayāru* 'to plough without seeder; land ploughed with the *m*-plough' SB on (CAD *m*, 120; AHw, 587); Syr. *marr-*, *maʔr-* 'marra, pala ferrea vel ligo' (Brock., 400); Arb. *marr-* 'pelle en fer' (BK 2, 1083); Amh. *mārāmmārā* 'to dig', Gur. **mirāmārā* 'to plough a field for the third time' (LGur., 422; redupl.).

Ch. W.: Bol. *mar-*; Dera *marra*; Ngm. *mira* (<*myr) 'to hoe'; Ang. *mār* 'to farm'; Sura *māar* (<*maHar-); Ank. *mār*; Ngm. *marra* 'farm'; E.: Smr. *mīri* 'hoe' (Jung. CLR, II, 134; Stolbova 1987, 233).

Eg.: *mr* 'als Schriftzeichen: die hölzerne Hacke' Old Eg. (EG II, 98).

Cu. E.: Had. *morāra* 'the hook of the plough' (LGur., 423).

Cf. Militarev 1984a, 60; differently in HSED, Nos. 1738, 1739.

28. Afras. *ngl 'to reap' (> *mi/a-ngal- 'sickle' Sem.) ~ *nVgi/ula(-t)- 'sickle' (Ch.)

Sem.: Akk. *niggallu*, *ningallu* 'sickle' OB, OA on (CAD *n2*, 213; AHw, 787; acc. to both sources, from Sum.; likely <*mi-ngal-); Hbr. *maggāl*; Jud. *maggəl-*, Syr. *maggalt-* id. (HAL, 545), Mnd. *manglia* 'sythes' (DM, 247); Arb. *nʕl* 'faucher (les céréales), labourer (la terre)' (Belot 1929, 807), *minʕal-* 'faucille de moissonneur' (BK 2, 1208). All <*mi/a-ngal- 'sickle', an instrumental noun derived from the verb **ngl* 'to reap' likely preserved in Arb.

Ch. **nVgi/ul(-at)-*: W.: Miya *ngəlatə*; Wrj. *ngəlatə-na*; Kry. *ngəlatə* 'sickle' (Skinner 1977, 39); C.: Nj. *ngila* 'knife, sword'; Gude *ngila* 'knife' (Kraft); E.: Mig. ? *àngùl* 'faucille' (Jungräthmayr & Adams 1992, 66; with ?a- prefixed).

29. Afras. *skk, *swk, *skw/y/? 'to cultivate, to hoe and sow'

Sem.: Akk. *šakāku* 'to harrow' OA, OB on (CAD š1, 113; AHw 1134), *šikkatu* 'harrowed land' OB (CAD š2, 433; AHw, 1234); (?) Sab. *s₁kt*, a proper name probably meaning 'plough' or 'harrow' (in: ?hl *hrt₁ s₁ktn* Conti Rossini 1931, 195; the interpretation of *s₁kt* as 'plough' or 'harrow' and the whole context as 'folk ploughing with a plough or harrow' is highly hypothetical).

(?) Brb.: Zmr., Iger. *səkka* Tfl. *ta-skki-t* 'soc de la charru'; Mz. *skkə-t* 'charru', *skka* 'labourer' (Laoust 1920, 282, 285; all these forms may, or may not, be Arb. loans, cf. Arb. *sikkat-* 'soc de la charru' BK 1, 1112, likely borrowed from Arm. *sikkat-* 'peg, nail, ploughshare', cf. Kaufman 1974, 91, stemming from Sem. **sikk-at-* < Afras. **cikk-at-*).

Ch. **swk ~ *skw*: W.: Hs. *šuka* 'to sow (i.e. place seed in ground and cover with soil)' (Bargery 1934, 944), *šəkwa-mī* 'a long-handled hoe used at sowing time' (Bargery 1934, 888), *soke* 'to reap corn by uprooting the whole plant with a special instrument' (Bargery 1934, 951); Sura *sak* 'to hoe, plough'; Tng. *suk* 'to plough' (Stolbova 1987, 177: <*sak^(w)-); C.: Vulum *sūki*; Msg. *suki*, *sokā* 'faire le trou avant de semer'; Mbr. *čók* 'to sow' (Takács 1999, 236); cf. Bura group **šakw-*; Gude *šakwa*, Lame *šukwēi* 'sickle' (Skinner 1996, 186; *š- <*s- in C. Ch.? Cf. Stolbova 1996, 55). Cf. E. **sūk-* 'grenier': Bid., Mok. (Skinner 1996, 239).

Eg. *sk*: 'pflügen (mit dem Pflug, mit der Hacke)' Pyr. (EG IV, 315–16), 'der Ertrag der Feldbestellung, die Ernte' MK (EG IV, 316), *stʕ* 'säen, ausstreuen' Pyr. (EG IV, 346); <*sk?/y).

Om. N.: Sheko *šookk-* 'säen'; Kf. *šok* 'to sow'; Bw. *šookà* 'Saat; Same' (Lamberti 1993, 374–5); Mč. *šökki* 'seed' (Leslau 1959, 50).

30. Afras. *sVkay/w- 'land not cultivated actually, fallow' (very likely related to No. 29)

Sem.: Tgr. *šeka*, *šekät* 'field, meadow, valley'; Tna. *šāka* 'water-meadow' (LH, 222).

Brb. N.: **su/ik(V)y*: Bmrn. *i-ssukī*; Ntf., Zmr. *i-ssīki*; Tfl. *a-ssiki*; Izd. *isiki* (pl. *isak-at-ən*); Izy. *a-siki*; Qbl. *a-sukī*; Shw. *a-m-sukī* 'jachère' (Laoust 1920, 261–2).

Ch. W.: Hs. *šeka* 'a piece of waste, uncultivated land

inside a compound' (Bargery 1934, 935); C.: Log. *skò* 'field, farm' (Jung, CLR, II, 135, apud. Bouny).

Cu. C.: Bil. *šákā, šékā* 'Ebene, Steppe' (Reinisch 1887, 319; probably from Eth.).

31. Afras. **ʒVry/?/÷* ~ **ʒ̣Vry/?/÷* 'seed, sowing, sown field', **ʒry/w/?/÷* ~ **ʒ̣ry/w/?/÷* 'to sow, cultivate' (related to, or contaminated with, No. 32?)

Sem.: Akk. *zēru* (*zar?u*) 'seed (of cereals and of other plants); acreage, arable land' OAKk. on (CAD z, 89); Ugr. *d/dr+* 'simiente, grano de siembta, sementera; semilla', *dr+* 'sembrar, diseminar' (DLU, 137); Hbr. *zr+* 'to sow', *zāra+* 'seed'; Ph., Yaud. *zr+*; Arm. Bib. *zəra+*; Emp., Eg. *zr+* 'seed, descendance' (HAL, 1867–8); Jud. *dr+* 'to sow', *dəra+*, *dar+ā* 'seed, produce, offspring' (Ja., 324), *zəra+*, *zar+ā* 'seed', *zr+* 'to strew, sow' (Ja., 414); Syr. *zr+* 'seminavit', *zar+ā* 'semen' (Brock., 207); Mnd. ZRA 'to sow, scatter' (DM, 170), *zira* 'seed, semen' (DM, 167); Arb. *dry/w* 'répandre la semence (en semant), semer' (BK 1, 771), *ḍurat-* 'dorra, espèce de millet' (BK 1, 772), *ḍr?* 'ensemencer (la terre)' (BK 1, 767), *zr+* 'semer, répandre la semence; ensementer un champ de quelque graine', *zur+* 'semence; céréales sur pied, champ cultivé' (BK 1, 124); Sab. *m-ḍr?-t* 'sown field, sown ground' (SD, 40); Gez. *zar?a*, *zar+a* 'to seed, sow, scatter seed', *zar?* 'seed, seedling, plantation'; Tgr. *zār?a*; Tna *zār?e*; Amh., Arg., Gur. **zārra*; Har. *zāra?a*; Gaf. *zārā* 'to seed, sow' (LGz., 642); Gur. **zār* 'grain, seed' (LGur., 713); Mhr. *zūra* '(plants) to grow', *ha-zrē* 'to cultivate'; S. Mhr. *zərēt* 'plantation, cultivated area' (JM, 469), *ḍəráyyət* 'offspring' (JM, 81); Jib. *zēra+* '(plants) to grow', *ezóra+* 'to plant many seeds', *zēra+* 'farmer' (JJ, 320), *ḍərrít* 'progeny, offspring' (JJ, 47) (cf. also Mhr. *ḍərēt* JM, 82; Jib. *ḍérēt* 'sorghum, *dhurah*' JJ, 47, likely Arabisms); Soq. *deri* 'semence' (LS, 135).

Ch. W.: Pero *žúrà* 'groundnuts' (Frajzyngier 1985, 34; no other voiced sibilant or affricate in Pero to render **ʒ* or **ʒ̣*).

Eg.: z: 'Bez. der achtel Arure, acht Aruren Acker' Gr., late Eg. (EG III, 411), 'Art Acker' Gr. (EG III, 414); <**ʒVr* or **ʒ̣Vr*.

Cu. **ʒVr/?/y/w-* or **ʒ̣Vr/?/y/w-* 'seed' ~ **ʒyr/ʒry* or **ʒyr/ʒry* 'to sow, cultivate': N.: Beja *derá?* 'Samen' (Reinisch 1895, 70; unless an Arabism; cf. *sér?a* id., *sera?* 'säen' Reinisch 1895, 204; acc. to Takács 1999, 267–8; Afras. **ʒ* and **ʒ̣* yield Beja *d* and *y* while acc. to Dolgopolsky 1973, 326, Afras. **ʒ* > Beja *s/š* and

Afras. *ʒ* > Beja *d*); C.: Khmr. *zürü* 'Weizen' (Reinisch 1884, 411), *zir-* 'to sow'; Kem. *zar-* id.; Aw. *zer*; E.: Gid. *zare*; Kmb., Had. *zare-tta*; Alaba *zari-t?*; Afar *diriyi*; Saho *dara* 'seed', *-idiriy-* 'to cultivate' (Lamb. Wol., 562).

(?) Om. N. **ʒVry-* or **ʒ̣Vry-* 'seed' ~ **ʒyr* or **ʒyr* 'to sow': Wol. *zer-* 'to spread, to seed' (Lamb. Wol., 561), *zere-tta*; Malo *zere-ts*; Gamu, Dače *zere-ttsi*; Bencho *zar* 'seed'; Kač. *zeer-* 'to sow' (Lamb. Wol., 562). Acc. to Lamb. Wol., 561–2, all Cu. and Om. forms are borrowed from Eth., though a wide spread of these forms in three branches of Cu. rather speaks for their Afras. origin; borrowing of the Om. forms from Eth. or E. Cu. is possible.

32. Afras. **ʒrr/w/y/?* ~ **wʒr* 'to scatter, spread (seed), winnow' (related to, or contaminated with, No. 31?)

Sem.: Akk. *zarû* 'to sow seed broadcast; scatter, sprinkle; winnow' OB on (CAD z, 70); Hbr. *zry* 'to scatter, winnow' (HAL, 280); Jud. *dry*, *dr?* 'to scatter, strew; winnow' (Ja., 322), *zry*, *zr?* 'to scatter' (Ja., 413; borrowed from Hbr.?); Syr. *dr?* 'sparsit, dispersit', *madrəy-* 'vannus' (Brock., 165), Mnd. DRA 'to scatter (e.g. the yearly harvest, the seed)' (DM, 114); Arb. *dry/w* 'vanner, nettoyer (le grain) en le lançant au vent avec une pelle ou avec un van' (BK 1, 771); Gez. *zarawa* 'to scatter, spread around, disperse'; Tna *zārāwā* 'to scatter', (*?a*)*zrāwā*, (*?a*)*zrāyā* 'to winnow'; Amh. (*a*)*zārā* 'to winnow, scatter' (LGz., 644), Har. (*a*)*zōra* 'to winnow' (Leslau 1963, 167); Gur. *(*a*)*zārā* 'to winnow grain by letting it fall from above the head' (LGur., 713); Mhr. *ḍər* 'to spread out; to spread (gravy, curry, seed)' (JM, 47); Jib. *ḍerr* 'to spread out', *ḍóttər* 'to be spread around (as, e.g. rice, sugar)' (JJ, 47; -t- stem).

Brb. **uzzar* 'vanner': Ntf. *a-z-úzzər* 'le vannage; action de séparer le grain de la paille broyée en le lançant en l'air à l'aide d'une fourche, puis d'une pelle', Zkara, Snus *s-úzzər* 'vanner'; Zmr., Qbl. *a-zu-zər* 'vannage' (Laoust 1920, 392); Ayr, E.Wlm. *uzzar* 'ê. versé sur le sol ou sur une natte pour que le vent emportes les débris de paille/les déchets/la poussière (grains des céréales, après le battage); ê. versé (en général)' (Alojaly 1980, 216).

(?) Eg.: *dy.w.t* 'Arbeiterin auf dem Gut bei der Ernte: Worflerin' OK (EG V, 421) <**ʒVr-w-t?* For Eg. *d* ~ Sem. *ḍ* <Afras. **ʒ*, cf.: (1) Eg. **idn* 'ear' OK ~ Sem. **ʔ uḍn-* id.; (2) Eg. *dbḥ* '(food) offering' MK ~ Sem. **ḍvbḥ-* 'sacrifice' ~ Ch. E.: Bid. *ziib* 'faire les pre-

miers sacrifices avant de manger les nouvelles récoltes' ~ Cu. E.: Som. *dabaah* 'slaughter'; (3) Eg. *db* 'jackal' CT, *z:b* id. OK ~ Sem. *di?b-* 'wolf, jackal'.

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